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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the Application of:

Thanos Karras

Serial No.:

09/681,306

Filed:

March 15, 2001

For:

INTEGRATION OF MOBILE

IMAGING UNITS INTO AN

APPLICATION SERVICE PROVIDER

FOR DATA STORAGE AND

INFORMATION SYSTEM SUPPORT

Examiner: Bleck, Carolyn M.

Group Art Unit: 3626

Conf. No.: 9546

EV 729160538 US Express Mail Label No.

September 12, 2006

Date

### **TRANSMITTAL**

Mail Stop APPEAL BRIEF-PATENTS Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Examiner Bleck:

The Applicants have enclosed the following:

(1) Brief on Appeal

As indicated in the enclosed papers, the Commissioner is authorized to charge these fees, and any other necessary fees, or credit any overpayment to the Deposit Account of GTC, Account No. 502401.

Respectfully submitted,

Date: September 12, 2006

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Brief on Appeal Application No. 09/681,306

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Docket No. 15-IS-5713 (13033US01)

In the Application of:

Thanos Karras

Serial No.:

09/681,306

Filed:

March 15, 2001

For:

INTEGRATION OF MOBILE IMAGING UNITS INTO AN APPLICATION SERVICE

PROVIDER FOR DATA STORAGE AND INFORMATION SYSTEM

**SUPPORT** 

Examiner: Bleck, Carolyn M.

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### **BRIEF ON APPEAL**

MAIL STOP: APPEAL BRIEF-PATENTS Board of Patent Appeals and Interferences United States Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

This is an appeal from a Final Office Action mailed April 14, 2006, in which claims 1, 3-9, 11-14, 16-17 and 19-36 were finally rejected. In an Amendment and Response After Final, claim 5 was amended and additional remarks were made to clarify distinctions between the claims and the prior art. An Advisory Action mailed July 5, 2005, entered the Amendment and Response After Final for purposes of appeal. This Appeal Brief is being submitted in support of the Notice of Appeal filed on July 14, 2006, following a Panel Decision from Pre-Appeal Brief Review, mailed August 8, 2006, to allow the application to remain under appeal. The Applicant respectfully requests that the Board of Patent Appeals and Interferences reverse the final rejection of claims 1, 3-9, 11-14, 16-17 and 19-36 of the present application. Pursuant to 37 CFR § 1.17(c), the fee for filing this brief is

\$500, to be charged to the Deposit Account of GEMS-IT, 502401, along with any other fees due in relation to this application.

#### **REAL PARTY IN INTEREST**

G.E. Medical Systems Information Technologies, Inc., a Wisconsin Corporation having a place of business at 8200 West Tower Avenue, Milwaukee, WI 53223-3293, has acquired the entire right, title and interest in and to the invention, the application, and any and all patents to be obtained therefor, as set forth in the Assignment filed with the present application and recorded on Reel 011863, frame 0741.

### RELATED APPEALS AND INTERFERENCES

There currently are no appeals pending regarding related applications.

### STATUS OF CLAIMS

Claims 1, 3-9, 11-14, 16-17 and 19-36 are pending in the present application. Pending claims 1, 3-9, 11-14, 16-17 and 19-36 have been rejected and are the subject of this appeal. Specifically, claims 21-22 were rejected under 35 U.S.C. § 102(b) as being anticipated by Wood et al., U.S. Pat. No. 5,891,035 ("Wood '035"). Claims 1, 4-5, 7-9, 11, 13-14, 33-34 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Evans, U.S. Pat. No. 5,924,074 ("Evans") in view of Wood et al., U.S. Pat. No. 5,851,186 ("Wood '186"). Claim 3 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Evans and Wood '186 and further in view of Wood '035. Claims 6, 12, and 16 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Evans and Wood '186 and further in view of Rothschild et al., U.S. Pat. No. 6,678,703 ("Rothschild"). Claims 17 and 19-20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Applicant's Background and further in view of Rothschild. Claim 23 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Applicant's Background and further in view of Rothschild. Claim 23 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Evans. Claims 24-32 and 35-36 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Evans and further in view of Rothschild and Wood '035.

#### STATUS OF AMENDMENTS

There are no amendments pending in the present application.

### SUMMARY OF CLAIMED SUBJECT MATTER

The claimed subject matter relates to a method and system for integration of mobile imaging units into an application service provider for data storage and information system support.<sup>1</sup> Certain embodiments provide a remotely accessible centralized medical image data storage system including a plurality of subsystems, such as a data center, one or more mobile imaging units, and one or more mobile imaging unit/data center communication interface.<sup>2</sup>

The mobile imaging unit connects to the data center via the mobile imaging unit/data center communication interface.<sup>3</sup> The mobile imaging unit/data center communication interface may be a cellular network, a radio frequency (RF) wireless local area network (LAN), microwave network, satellite transmission network, wire-based network (such as Ethernet), as examples.<sup>4</sup> The data center stores information such as images, examination data, and reports.<sup>5</sup> The data center may also host applications, such as medical imaging applications, medical diagnostic applications, administrative applications, and scheduling applications, for example.<sup>6</sup> The data center may include processing power to facilitate the activation or access of the applications at the data center.<sup>7</sup>

In an embodiment, the data center is managed by an application server provider (ASP) located remotely from the mobile imaging unit.<sup>8</sup> Preferably, the data center is geographically distinct from the mobile imaging unit.<sup>9</sup> The data center may be accessed

<sup>&</sup>lt;sup>1</sup> Application No. 09/681,306 ("Application"), at Abstract, page 2, paragraph 16 and paragraph 26 (attached as Evidence Appendix A).

<sup>&</sup>lt;sup>2</sup> See, e.g., Application, at page 2, paragraph 26, page 3, paragraph 34 and page 3, paragraph 41.

<sup>&</sup>lt;sup>3</sup> See, e.g., Application, at page 2, paragraph 27.

<sup>&</sup>lt;sup>4</sup> Id

<sup>&</sup>lt;sup>5</sup> See, e.g., Application, at page 2, paragraph 28.

<sup>&</sup>lt;sup>6</sup> *Id*.

<sup>7</sup> Id

<sup>&</sup>lt;sup>8</sup> See, e.g., Application, at page 2, paragraph 29.

<sup>&</sup>lt;sup>9</sup> Id.

(for example, transmission or receipt of data or execution of applications) by the mobile imaging unit via the mobile imaging unit/data center communication interface.<sup>10</sup>

The mobile imaging unit <u>includes</u> medical diagnostic equipment, such as MR (magnetic resonance) imaging equipment, CT (computerized tomography) imaging equipment, and/or ECG (electrocardiogram) equipment, as examples. The mobile imaging unit may also <u>include</u> paramedic equipment, such as first aid equipment, cardiac equipment, and/or life support equipment, for example. The mobile imaging unit is a mobile imaging facility, for example a truck or van, that may be positioned outside an healthcare facility. The mobile imaging unit facilitates medical diagnostic examination of a patient (for example, a MR or CT scan). Data from the medical diagnostic examination (for example, an image) is transmitted to the data center via the mobile imaging unit/data center communication interface. The data center may store the examination data for later retrieval by the mobile imaging unit or other entity. Additionally, the medical imaging unit may access medical applications via the data center.

As an example, a medical diagnostic examination of a patient is performed at the mobile imaging unit, and a resulting medical diagnostic image is obtained.<sup>18</sup> Then, the mobile imaging unit accesses the data center via the mobile imaging unit/data center communication interface.<sup>19</sup> Next, the mobile imaging unit stores the medical diagnostic image at the data center.<sup>20</sup> Storage and access of data occurs independent of the locations of the mobile imaging unit and the data center.<sup>21</sup>

As another example, multiple patient examinations may be scheduled at the mobile imaging unit.<sup>22</sup> To perform scheduling, the mobile imaging unit may access the

<sup>22</sup> See, e.g., Application, at page 3, paragraph 33.

<sup>Id.
See, e.g., Application, at page 3, paragraph 30.
Id.
See, e.g., Application, at page 1, paragraph 3.
See, e.g., Application, at page 3, paragraph 31.
Id.
Id.
Id.
Id.
See, e.g., Application, at page 3, paragraph 32.
Id.
See, e.g., Application, at page 3, paragraph 32.
Id.
Id.</sup> 

data center.<sup>23</sup> Next, the mobile imaging unit may access a patient scheduling application hosted by the data center.<sup>24</sup> Then, the mobile imaging unit may execute the patient scheduling application via the data center and thus schedule patient examinations.<sup>25</sup>

Thus, certain embodiments provide for a system and method for integrating mobile imaging units into an application service provider for data storage and information system support. Certain embodiments provide centralized information storage and access and reduce the resource needed to coordinate between mobile imaging units and healthcare facilities. Thus, mobile imaging units and healthcare facilities may share and compare data and images in various physical locations. Relatively immediate access to examination images and data may be granted independent of location, and later analysis may be performed at another facility or remote location.<sup>26</sup>

Independent claim 1 is directed to a remotely accessible centralized medical information system. The system includes a mobile imaging unit for generating medical data storable in a data center, wherein the mobile imaging unit is a mobile facility adapted to be used at a plurality of locations. The system also includes at least one data retriever for retrieving data from a data center. The system further includes a data center for storing data. The data center is accessible from the at least one data retriever. The at least one data retriever is(are) located at one or more distinct geographic retrieval points.

Independent claim 1 is described in the specification at, for example, page 2, paragraph 26 – page 4, paragraph 51 and Figures 1-3. The system of claim 1 operates substantially as described above and as illustrated in the cited sections. The mobile imaging unit 120, 220, 320, 322, 324 is a mobile imaging facility, defined above, which is positioned at a location and generates medical data. The data is stored in a data center 110, 210, 310. The data may be retrieved from the data center 110, 210, 310 using one or more data retrievers located at one or more distinct geographical retrieval locations. Thus, storage, retrieval and review of medical data do not have to all occur at the site where the data is obtained. The mobile imaging unit 120, 220, 320, 322, 324 can be brought to a particular location to generate the data and transfer the data to the data center

<sup>&</sup>lt;sup>23</sup> *Id*.

<sup>&</sup>lt;sup>24</sup> *Id*.

<sup>&</sup>lt;sup>25</sup> Id.

<sup>&</sup>lt;sup>26</sup> Application, at pages 5-6, paragraph 61.

110, 210, 310, and the data retriever can be used to later review the obtained data from the data center 110, 210, 310.

Independent claim 13 is directed to a centrally accessible medical information system. The system includes a mobile imaging unit 120, 220, 320, 322, 324 for retrieving data from a data center 110, 210, 310, wherein the mobile imaging unit 120, 220, 320, 322, 324 is a mobile facility adapted to be used at a plurality of locations. The system also includes a data center 110, 210, 310 for storing data. The data center 110, 210, 310 is geographically distinct from said mobile imaging unit 120, 220, 320, 322, 324.

Independent claim 13 is described in the specification at, for example, page 2, paragraph 26 – page 4, paragraph 51 and Figures 1-3. The system of claim 13 operates substantially as described above and as illustrated in the cited sections. The mobile imaging unit 120, 220, 320, 322, 324 is a mobile imaging facility, defined above, which is positioned at a location and retrieves medical data. The data is stored in a data center 110, 210, 310. The data may be retrieved from the data center 110, 210, 310 for use at the mobile imaging unit 120, 220, 320, 322, 324. Thus, storage, retrieval and review of medical data do not have to all occur at the site where the data is obtained. The mobile imaging unit 120, 220, 320, 322, 324 can be brought to a particular location to retrieve the data from the data center 110, 210, 310.

Similarly, independent claim 17 is directed to a remotely accessible centralized medical application service provider system. The system includes a medical application center 110, 210, 310 including at least one medical application, said medical application center 110, 210, 310 including processing power for accessing said medical application. The system also includes a mobile imaging unit 120, 220, 320, 322, 324, wherein the mobile imaging unit 120, 220, 320, 322, 324 is a mobile facility adapted to be used at a plurality of locations. The mobile imaging unit 120, 220, 320, 322, 324 accesses the output of the medical application. Independent claim 17 is described in the specification at, for example, page 2, paragraph 26 – page 4, paragraph 51 and Figures 1-3. The system of claim 17 operates substantially as described above and as illustrated in the cited sections.

Independent claim 21 is directed to a remotely accessible centralized data storage system for mobile medical imaging. The system includes a mobile imaging unit 120, 220, 320, 322, 324 including medical imaging equipment, wherein said mobile imaging unit 120, 220, 320, 322, 324 is a mobile facility adapted to be used at a plurality of locations. The system also includes a data center 110, 210, 310 storing medical information in electronic form. The system further includes a mobile imaging unit/data center communication interface 130, 230, 330, 332, 334 allowing medical information to be transmitted between the mobile imaging unit 120, 220, 320, 322, 324 and the data center 110, 210, 310. Independent claim 21 is described in the specification at, for example, page 2, paragraph 26 – page 4, paragraph 51 and Figures 1-3. The system of claim 21 operates substantially as described above and as illustrated in the cited sections.

Independent claim 29 is directed to a system for communication between a mobile imaging unit and a healthcare facility. The system includes a mobile imaging unit 120, 220, 320, 322, 324 capable of transmitting medical diagnostic information, wherein the mobile imaging unit 120, 220, 320, 322, 324 is a mobile facility adapted to be used at a plurality of locations. The system also includes a data center 110, 210, 310 capable of receiving the medical diagnostic information, storing the medical diagnostic information, and transmitting the medical diagnostic information. The system further includes a healthcare facility 140, 240, 340, 342, 344 capable of accessing the medical diagnostic information from the data center 110, 210, 310. Independent claim 29 is described in the specification at, for example, page 2, paragraph 26 – page 4, paragraph 51 and Figures 1-3. The system of claim 29 operates substantially as described above and as illustrated in the cited sections.

Independent claim 24 is direct to a method for remotely storing medical information. The method includes transmitting medical information collected from a patient at a mobile imaging unit 120, 220, 320, 322, 324 to a data center 110, 210, 310, wherein the mobile imaging unit 120, 220, 320, 322, 324 is a mobile facility adapted to be used at a plurality of locations (410, 415, 420, 710, 720, 730, 740). The method also includes storing the medical information at the data center 110, 210, 310 (430). Independent claim 24 is described in the specification at, for example, page 2, paragraph

26 - page 4, paragraph 52 and Figures 1-4. The method of claim 24 is executed substantially as described above and as illustrated in the cited sections.

Independent claim 28 is direct to a method for communicating between a mobile imaging unit 120, 220, 320, 322, 324 and a healthcare facility 140, 240, 340, 342, 344. The method includes transmitting information from the mobile imaging unit 120, 220, 320, 322, 324 to a data center 110, 210, 310, wherein the mobile imaging unit 120, 220, 320, 322, 324 is a mobile facility adapted to be used at a plurality of locations (410, 415, 420, 710, 720, 730, 740). The method also includes retrieving the information from the data center 110, 210, 310 at the healthcare facility 140, 240, 340, 342, 344 (610, 620, 630, 640, 750, 760). Independent claim 28 is described in the specification at, for example, page 2, paragraph 26 - page 5, paragraph 59 and Figures 1-7. The method of claim 28 is executed substantially as described above and as illustrated in the cited sections.

Independent claim 33 is direct to a method for remotely accessing medical information. The method includes accessing a data center 110, 210, 310 from a mobile imaging unit 120, 220, 320, 322, 324 at a remote location, wherein the mobile imaging unit 120, 220, 320, 322, 324 is a mobile facility adapted to be used at a plurality of locations (510). The method also includes retrieving medical information from the data center 110, 210, 310 (520, 530, 540). Independent claim 33 is described in the specification at, for example, page 2, paragraph 26 - page 5, paragraph 53 and Figures 1-5. The method of claim 33 is executed substantially as described above and as illustrated in the cited sections.

### GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

- I. Are claims 21-22 anticipated under 35 U.S.C. § 102(b) by Wood '035?
- II. Are claims 1, 4-5, 7-9, 11, 13-14 and 33-34 unpatentable under 35 U.S.C. § 103(a) over Evans in view of Wood '186?
- III. Is claim 3 unpatentable under 35 U.S.C. § 103(a) over Evans and Wood '186 and further in view of Wood '035?
- IV. Are claims 6, 12, and 16 unpatentable under 35 U.S.C. § 103(a) over Evans and Wood '186 and further in view of Rothschild?

- V. Are claims 17 and 19-20 unpatentable under 35 U.S.C. § 103(a) over Applicant's Background and further in view of Rothschild?
- VI. Is claim 23 unpatentable under 35 U.S.C. § 103(a) over Wood '035 and further in view of Evans?
- VII. Are claims 24-32 and 35-36 unpatentable under 35 U.S.C. § 103(a) over Evans and further in view of Rothschild and Wood '035?

#### **ARGUMENT**

# I. Claims 21-22 are patentable under 35 U.S.C. § 102(b) in view of Wood '035.

In the Final Office Action of April 14, 2006, the Examiner rejected claims 21-22 under 35 U.S.C. 102(b) as being unpatentable over Wood '035.<sup>27</sup> 35 U.S.C. 102(b) states:

A person shall be entitled to a patent unless —

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States,

To anticipate a claim, the reference must teach every element of the claim. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." 28

The text of independent claim 21 is found in the claims appendix (attached) and is also recited in sentence form above. Wood '035 is the foundational reference relied upon by the Examiner in rejecting claims throughout the examination of the present application.<sup>29</sup> Wood '035 generally relates to an ultrasonic diagnostic imaging system with data access and communications capability. Wood '035 discusses, beginning at col. 3, line 27 and as illustrated in Fig. 1, an ultrasound system including an HTTP server. The HTTP server is connected to access ultrasonic images and reports from a storage

<sup>&</sup>lt;sup>27</sup> The Final Office Action mailed on April 14, 2006, is attached as Evidence Appendix B.

<sup>&</sup>lt;sup>28</sup> Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir.

<sup>&</sup>lt;sup>29</sup> U.S. Patent No. 5,891,035 by Wood ("Wood '035") is attached as Evidence Appendix C.

medium and makes the system's images and reports accessible to a computer, terminal, or workstation at a remote location.

As shown in Fig. 2, the ultrasound system of Wood '035 is illustrated on a mobile cart. The ultrasound system of Wood '035 is not a *mobile facility* adapted to be used at a plurality of locations, as recited in claim 21, as amended in the Office Action Response of Feb. 8, 2006. Wood '035 does not teach or fairly suggest at least "a mobile imaging unit including medical imaging equipment, wherein said mobile imaging unit is *a mobile facility* adapted to be used at a plurality of locations." Rather, Wood '035 simply discloses the medical imaging equipment that can be *included* in the mobile imaging facility. Even though the ultrasound system may have wheels, it is still medical imaging equipment and not a mobile facility including medical imaging equipment. Additionally, Wood '035 does not disclose "a mobile imaging unit/data center communication interface allowing medical information to be transmitted between said mobile imaging unit and said data center" for at least the reason that Wood '035 simply does not disclose a mobile imaging unit as recited in claim 21.

Of particular interest to the Examiner was any correlation between the mobile ultrasound cart of Wood '035 and the mobile imaging unit recited in the pending claims. See April 14, 2006 Office Action at pages 3, 5-6 and 8, June 14, 2006 Amendment and Response<sup>31</sup> at pages 8-10 and February 8, 2005 Amendment and Response at pages 9-10. While the Wood '035 references discuss a wheeled cart that may be rolled around a hospital, the pending claims recite a mobile imaging unit, which is described as a mobile facility adapted to be used a plurality of locations. See June 14, 2006 Amendment and Response at pages 8-10 and February 8, 2005 Amendment and Response at pages 9-10. The mobile facility is a vehicle that includes imaging equipment, and the Applicant has gone to great lengths to explain this in the claims and in responses to the Examiner's rejections. See, e.g., June 14, 2006 Amendment and Response at pages 8-10 and February 8, 2005 Amendment and Response at pages 9-10. The Applicant's specification supports a construction of a mobile imaging unit as a mobile facility or vehicle. See June 14, 2006 Amendment and Response at page 14. However, the Examiner appears to be

<sup>&</sup>lt;sup>30</sup> The Office Action Response filed on February 8, 2006, is attached as Evidence Appendix D.

The Office Action Response filed on June 14, 2006 is attached as Evidence Appendix E.

glossing over or ignoring these claim amendments and remarks. See July 5, 2006 Advisory Action at page 2.<sup>32</sup> These amendments and remarks should be allowed to distinguish the mobile imaging unit described and claimed in the present application from the wheeled cart of Wood '035.

Additionally, in the Examiner's Advisory Action of July 5, 2006, the Examiner states that a description of various embodiments and use of conditional "may" language does not qualify as a description of the invention. See July 5, 2006 Advisory Action at page 2. The Applicant submits that these statements and interpretation of 35 U.S.C. 112 are incorrect. To satisfy the requirements of 35 U.S.C. 112, the Applicant must provide a written description of the invention to enable any person skilled in the art to make and use the invention. 35 U.S.C. 112 ¶ 1. The specification shall also set forth the best mode contemplated by the inventor of carrying out his or her invention. Id. The statute makes no requirement that a best mode must be highlighted or stated as "required", only that the best mode be sufficiently set forth. Id. Therefore, the Applicant respectfully submits that the Examiner's interpretation of 35 U.S.C. 112 and her construction of the term "mobile imaging unit" as set forth in the patent specification and claims, and as discussed in the prosecution history, is incorrect. See June 14, 2006 Amendment and Response at page A description of various embodiments and various alternatives is sufficient description of the meanings of mobile imaging units, and the Applicant is entitled to at least those disclosed embodiments and their equivalents. The claims are to be interpreted in light of the specification, and the Applicant is entitled to be his or her own lexicographer in defining and describing the claimed terms. The meaning of the term "mobile imaging unit" is clear in the specification to a person skilled in the art, and the Examiner should fairly rely on that meaning in interpreting the claims in view of the prior art. See, e.g., MPEP 6801.01(o).

The Applicant defines a "mobile imaging unit" in the claims and provides some exemplary embodiments in the specification (e.g., a truck or van), which may *include* equipment for magnetic resonance, computerized tomography, ultrasound, and/or other imaging or monitoring equipment (e.g., ECG) to facilitate medical examination of

 $<sup>^{\</sup>rm 32}$  The Advisory Action mailed July 5, 2006, is attached as Evidence Appendix F.

patients). (See, e.g., page 1, paragraphs 2 and 3, page 2, paragraphs 16 and 27 and page 5, paragraph 59).

Thus, Wood '035 does not teach the limitations of claims 21-22, and the Examiner's rejection should not be allowed to stand. Allowance of claims 21-22 is respectfully requested.

# II. Claims 1, 4-5, 7-9, 11, 13-14 and 33-34 are patentable under 35 U.S.C. § 103(a) over Evans in view of Wood '186.

In the Final Office Action of April 14, 2006, the Examiner rejected claims 1, 4-5, 7-9, 11, 13-14 and 33-34 under 35 U.S.C. 103(a) as being unpatentable over Evans in view of Wood '186.<sup>33</sup> 35 U.S.C. 103(a) states:

A patent may not be obtained thought the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

To render a claim obvious, there must be some suggestion or motivation to combine the references.<sup>34</sup> Additionally, there must be a reasonable expectation of success.<sup>35</sup> Finally, the combined references must teach or suggest all the claim limitations.<sup>36</sup>

The law is well settled that "obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion or incentive to do so." Additionally, the Examiner is not permitted to use an improper hindsight reconstruction of the claimed invention in rejecting the claims. Use of hindsight analysis has been specifically condemned by the Federal Circuit:

The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the

<sup>&</sup>lt;sup>33</sup> U.S. Patent No. 5,924,074 by Evans ("Evans") is attached as Evidence Appendix G. U.S. Patent No. 5,851,186 by Wood ("Wood '186") is attached as Evidence Appendix H.

<sup>&</sup>lt;sup>34</sup> M.P.E.P. § 706.02(j) (May 2004).

<sup>&</sup>lt;sup>35</sup> *Id*.

 $<sup>^{36}</sup>$  Id

<sup>&</sup>lt;sup>37</sup> ACS Hospital Systems, Inc. v. Montfiore Hospital, 732 F.2d 1572, 1577, 221 U.S.P.Q. 929 (Fed. Cir. 1984).

modification obvious unless the prior art suggested the desirability of the modification ... Here, the Examiner relied upon hindsight to arrive at the determination of obviousness. It is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the prior art so that the claimed invention is rendered obvious. This Court had previously stated that "one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention."

When a prior art reference must be modified to show a claimed invention, the prior art must suggest the modifications in order to make the claims obvious under 35 U.S.C. § 103.<sup>39</sup> The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on the applicant's disclosure.<sup>40</sup>

It is not permissible to pick and choose among the individual elements of assorted prior art references to re-create the claimed invention, but rather "some teaching or suggestion in the references to support their use in the particular claimed combination" is needed. That is, in order to combine two or more prior art references to make claims obvious under 35 U.S.C. § 103, the prior art references must suggest the combination of their teachings. In *Ex parte Hiyamazi*<sup>43</sup>, the Board of Patent Appeals and Interferences reversed a rejection based on a combination of references, stating, in part:

Under 35 USC § 103, where the Examiner has relied upon the teachings of several references, the test is whether or not the reference viewed individually and collectively would have suggested the claimed invention to the person possessing ordinary skill in the art. Note *In re Kaslow*, 707 F.2d 1366, 107 USPQ 1089 (Fed. Cir. 1983). It is to be noted, however, that citing references which merely indicate the isolated elements and/or features recited in the claims are known is not a sufficient basis for concluding that the combination of claimed references would have been

<sup>&</sup>lt;sup>38</sup> In Re John Fritch, 972 F.2d 1260, 23 U.S.P.Q. 2d 1780, 1783 (Fed. Cir. 1992). See also Hodosh v. Block Drug Co., Inc., 786 F.2d 1135, 1143 n.5, 229 U.S.P.Q. 182, 187 n.5 (Fed. Cir. 1986); MPEP 2141.

ACS Hospital Systems, 732 F.2d at 1577.
 In re Vaeck, 947 F.2d 488, 20 U.S.P.Q. 2d 1438 (Fed. Cir. 1991).

<sup>&</sup>lt;sup>41</sup> Symbol Technologies, Inc. v. Opticon, Inc. 935 F.2d 1569, 1576, 19 U.S.P.Q.2d 1241 (Fed. Cir. 1991).

<sup>&</sup>lt;sup>42</sup> ACS Hospital Systems, 732 F.2d at 1577.

<sup>&</sup>lt;sup>43</sup> Ex parte Hiyamazi, 10 U.S.P.Q.2d 1393 (Bd. Pat. App. & Interf. 1988).

obvious. That is to say, there should be something in the prior art or a convincing line of reasoning in the answer suggesting the desirability of combining the claimed invention. Note *In re Deminski*, 796 F.2d 436, 230 USPQ 313 (Fed. Cir. 1986).<sup>44</sup>

The law also is very clear that a finding of obviousness can only be premised on prior art references from analogous areas of art and not on art from nonanalogous areas. Specifically, the Federal Circuit has applied the following two-step test:

The determination that a reference is from a nonanalogous art is therefore twofold. First, we decide if the reference is within the field of the inventor's endeavor. If it is not, we proceed to determine whether the reference is reasonably pertinent to the particular problem with which the inventor was involved.<sup>45</sup>

As described above, Wood '035 does not teach or suggest the limitations of the claimed invention. Wood '186 relates to an ultrasonic diagnostic imaging system with universal access to diagnostic information and images. As discussed at col. 1, lines 43-48, Wood '186 discloses a medial diagnostic ultrasonic imaging system that can be remotely accessed, interrogated, or controlled from a remote location to provide information about the system's operating characteristics, patient images, and reports. As in Wood '035, Wood '186 does not teach or suggest a mobile imaging unit, wherein the mobile imaging unit is a mobile facility adapted to be used at a plurality of locations. Although Figs. 15-17, similar to Fig. 2 in Wood '035, described above, illustrate an ultrasound system on a wheeled cart, the ultrasound system of Wood '186 (and of Wood '035) is a medical imaging system and not a mobile imaging unit (i.e., a mobile imaging facility), as recited in independent claims 1, 9, 13 and 33, as well as their dependent Since he disclosure of the related Wood '186 reference includes a similar disclosure of an ultrasound cart, the analysis of the mobile imaging unit (facility) versus wheeled ultrasound cart holds true for claims 1, 4-5, 7-9, 11, 13-14 and 33-34 as well as claims 21-22, and the Applicant, referring to the discussion above, will not repeat those arguments here.

<sup>44</sup> Id. at 1394.

The Evans reference makes no mention of a mobile imaging unit. Evans generally relates to an electronic medical records system. As discussed beginning at col. 2, line 22, Evans discusses an electronic medical record system that automates and simplifies patient chart creation, maintenance, and retrieval. Evans creates and maintains all patient data electronically. As mentioned at col. 2, lines 45-47, Evans provides instant access to a patient's electronic medical record from any geographical location. That is, as clarified at col. 15, lines 18-20, Evans supports a large healthcare enterprise distributed across a large geography as well as a single physician office. Thus, Evans addresses geographically distributed, but fixed, facilities.

Evans does not teach mobile facilities, such as, mobile imaging units. The Examiner stated in the Office Action mailed January 25, 2006, at page 8, and in the Office Action mailed April 14, 2006, at page 5, that Evans fails to expressly disclose that a data generator is a mobile imaging unit. Similarly, at page 10 of the January Office Action and at page 6 of the April Office Action, the Examiner also states that Evans fails to expressly disclose the data retriever comprising a mobile imaging unit. And again, at pages 15 and 8, respectively, the Examiner states that Evans fails to expressly disclose "a mobile imaging unit" transmitting information to a data center.

Combining Evans with Wood '186 does not cure their deficiencies, highlighted above, with respect to pending claims 1, 4-5, 7-9, 11, 13-14 and 33-34. Therefore, the Examiner's rejection should not be allowed to stand. Allowance of claims 1, 4-5, 7-9, 11, 13-14 and 33-34 is respectfully requested.

# III. Claim 3 is patentable under 35 U.S.C. § 103(a) over Evans in view of Wood '186 and further in view of Wood '035.

In the Final Office Action of April 14, 2006, the Examiner rejected claim 3 under 35 U.S.C. 103(a) as being unpatentable over Evans in view of Wood '186 and further in view of Wood '035. As discussed above and as acknowledged by the Examiner, Evans does not teach or suggest a "mobile imaging unit" as recited in independent claim 1, from which claim 3 depends. In addition, neither Wood '035 nor Wood '186 overcome at least this shortcoming of Evans because, as discussed above, neither Wood '035 nor Wood

<sup>&</sup>lt;sup>45</sup> In re Deminski, 796 F.2d 436 (Fed. Cir. 1986).

'186 teach or suggest a mobile imaging unit, wherein the mobile imaging unit is a mobile facility adapted to be used at a plurality of locations, as recited in amended independent claim 1. Thus, none of Evans, Wood '035 or Wood '186, alone or in any combination, teach or suggest elements of independent claim 1, from which claim 3 depends.

Therefore, the Examiner's rejection should not be allowed to stand. Allowance of claim 3 is respectfully requested.

# IV. Claims 6, 12 and 16 are patentable under 35 U.S.C. § 103(a) over Evans in view of Wood '186 and further in view of Rothschild.

In the Final Office Action of April 14, 2006, the Examiner rejected claims 6, 12 and 16 under 35 U.S.C. 103(a) as being unpatentable over Evans in view of Wood '186 and further in view of Rothschild.<sup>46</sup> As discussed above and as acknowledged by the Examiner, Evans does not teach or suggest a "mobile imaging unit" as recited in independent claim 1, from which claim 3 depends. In addition, Wood '186 does not overcome at least this shortcoming of Evans because, as discussed above, Wood '186 does not teach or suggest a mobile imaging unit, wherein the mobile imaging unit is a mobile facility adapted to be used at a plurality of locations.

Rothschild generally relates to medical image management. Rothschild discusses, beginning at col. 17, line 66, storing images at three separate locations including locally at an imagining center and at two central data centers. In addition, images may be stored at a fourth remote viewing location. As illustrated in Fig. 1 and described beginning at col. 18, line 29, Rothschild discloses a medical image management system including a medical imaging system, a local image workstation, a central data management system, and a remote image viewing system.

Rothschild does not teach or suggest mobile facilities, such as, mobile imaging units. Rather, Rothschild merely contemplates fixed imaging centers, as illustrated, for example, beginning at col. 8, line 12, where Rothschild discusses providing a medical image management system to address the needs of referring physicians and other healthcare providers located outside of an imaging center.

<sup>&</sup>lt;sup>46</sup> U.S. Patent No. 6,678,703 by Rothschild ("Rothschild") is attached as Evidence Appendix I.

Since none of Rothschild, Evans or Wood '186 teach or suggest at least a mobile imaging unit as recited in claims 6, 12 and 16, no combination of Rothschild, Evans and/or Wood '186 can teach a mobile imaging unit. Therefore, the Examiner's rejection should not be allowed to stand. Allowance of claims 6, 12 and 16 is respectfully requested.

# V. Claims 17 and 19-20 are patentable under 35 U.S.C. § 103(a) over Applicant's Background of the Invention in view of Rothschild.

In the Final Office Action of April 14, 2006, the Examiner rejected claims 17 and 19-20 under 35 U.S.C. 103(a) as being unpatentable over the Applicant's Background of the Invention in view of Rothschild. With regard to claims 17 and 19-20, Applicant's Background identifies a problem that had yet to be solved and a combination that had yet to be realized in the art. The Applicant's Background addresses deficiencies which are remedied by the Applicant's novel solution and not by Rothschild. The Examiner relies upon statements in the Applicant's Background as admissions of prior art. See April 14, 2006 Office Action at pages 11-13. In fact, the statements cited by the Examiner highlight the Applicant's attempts to illustrate the current problems and deficiencies in the art. See June 14, 2006 Amendment and Response at pages 12-13.

For example, the Applicant notes that "[t]here is a need for centralized data storage to enable the patient's choice of hospital or clinical location." This is a need that the Applicant is attempting to satisfy with his invention. Furthermore, "[t]here is a need for a method of aggregating patient imaging results from mobile imaging units to eliminate manual transfer of files and to facilitate interaction among mobile units and between mobile units and healthcare facilities." This was a need the Applicant saw and was trying to meet. Centralized scheduling and reporting was another need that was unmet with mobile imaging units that the Applicant identified. "Thus, a need exists for a method and apparatus for integration of mobile imaging units into an Application Service Provider for data storage and information system support."

Clearly these statements were not admissions of prior art but, conversely, were highlighting problems and/or deficiencies which existed and for which remedies have been found in various embodiments of the invention described in the remainder of the

patent application. Thus, the Applicant illustrates a need for solutions that are then described in the present application. The Applicant's statements of needs or deficiencies should not be construed as admissions of prior art.

As discussed above, Rothschild does not teach or suggest a "mobile imaging unit" and thus, cannot provide any motivation to combine a mobile imaging unit with a medical application center, as recited in independent claim 17. Therefore, the Examiner's rejection should not be allowed to stand. Allowance of claims 17 and 19-20 is respectfully requested.

# VI. Claim 23 is patentable under 35 U.S.C. § 103(a) over Wood '035 in view of Evans.

In the Final Office Action of April 14, 2006, the Examiner rejected claim 23 under 35 U.S.C. 103(a) as being unpatentable over the Wood '035 in view of Evans. However, as discussed above, Wood '035 does not teach or suggest a mobile imaging unit, wherein the mobile imaging unit is a mobile facility adapted to be used at a plurality of locations as recited in amended independent claim 21, from which claim 23 depends. In addition, Evans does not overcome at least this shortcoming of Wood '035 because, as discussed above and as acknowledged by the Examiner, Evans does not teach or suggest a "mobile imaging unit" as recited in independent claim 21. Thus, neither Wood '035 nor Evans, alone or in combination, teach or suggest elements of independent claim 21, from which claim 23 depends. Therefore, the Examiner's rejection should not be allowed to stand. Allowance of claims 17 and 19-20 is respectfully requested.

# VII. Claims 24-32 and 35-36 are patentable under 35 U.S.C. § 103(a) over Evans in view of Rothschild and further in view of Wood '035.

In the Final Office Action of April 14, 2006, the Examiner rejected claims 24-32 and 35-36 under 35 U.S.C. 103(a) as being unpatentable over Evans in view of Rothschild and further in view of Wood '035. As discussed above and as acknowledged by the Examiner, Evans does not teach or suggest a "mobile imaging unit" as recited in independent claims 24, 28, and 29. In addition, Rothschild does not overcome at least this shortcoming of Evans because, as discussed above, Rothschild does not teach or

suggest a "mobile imaging unit" as recited in independent claims 24, 28, and 29. Furthermore, as discussed above, Wood '035 does not teach or suggest a "mobile imaging unit" as recited in independent claims 24, 28 and 29. Thus, none of Evans, Rothschild or Wood '035, alone, or in combination, teach or suggest all of the elements of independent claims 24, 28, and 29. Therefore, the Examiner's rejection should not be allowed to stand. Allowance of claims 17 and 19-20 is respectfully requested.

#### **CONCLUSION**

For the foregoing reasons, claims 1, 3-9, 11-14, 16-17 and 19-36 are distinguishable over the prior art of record. Thus, the Applicant respectfully requests a reversal of the Examiner's rejection and issuance of a patent on the present application. The Commissioner is hereby authorized to charge any additional fees or credit any overpayment to the deposit account of GEMS-IT, Account No. 502401.

Dated: September 12, 2006

Respectfully submitted,

Christopher N. George Attorney for Appellant Registration No. 51,728

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### **CLAIMS APPENDIX**

The following claims are involved in this appeal:

1. A remotely accessible centralized medical information system, said system comprising:

a mobile imaging unit for generating medical data storable in a data center, wherein said mobile imaging unit is a mobile facility adapted to be used at a plurality of locations;

at least one data retriever for retrieving data from a data center; and
a data center for storing data, said data center accessible from said at least
one data retriever, said at least one data retriever located at at least one distinct
geographic retrieval point.

- 2. (Cancelled)
- 3. The system of claim 1, wherein said data retriever comprises a mobile imaging unit.
- 4. The system of claim 1, wherein said data retriever comprises a healthcare facility.
- 5. The system of claim 1, further including a healthcare facility, wherein said healthcare facility is adapted to generate medical data storable in said data center.
- 6. The system of claim 1, wherein said data center comprises an application service provider.
- 7. The system of claim 1, wherein said mobile imaging unit generates medical images.
- 8. The system of claim 1, wherein said mobile imaging unit generates medical reports.
  - 9. A centralized medical information system, said system comprising:

a mobile imaging unit for generating data storable in a data center, wherein said mobile imaging unit is a mobile facility adapted to be used at a plurality of locations; and

a data center for storing data, said data center geographically distinct from said mobile imaging unit.

### 10. (Cancelled)

- 11. The system of claim 9, wherein said data generator comprises further including a healthcare facility, wherein said healthcare facility is adapted to generate data storable in said data center.
- 12. The system of claim 9, wherein said data center comprises an application service provider.
- 13. A centrally accessible medical information system, said system comprising:

a mobile imaging unit for retrieving data from a data center, wherein said mobile imaging unit is a mobile facility adapted to be used at a plurality of locations; and a data center for storing data, said data center geographically distinct from said mobile imaging unit.

14. The system of claim 13, wherein said data retriever comprises further including a healthcare facility, wherein said healthcare facility is adapted to retrieve data from a data center.

### 15. (Cancelled)

- 16. The system of claim 13, wherein said data center comprises an application service provider.
- 17. A remotely accessible centralized medical application service provider system, said system comprising:

a medical application center including at least one medical application, said medical application center including processing power for accessing said medical application; and

a mobile imaging unit, wherein said mobile imaging unit is a mobile facility adapted to be used at a plurality of locations, said mobile imaging unit accessing the output of said medical application.

### 18. (Cancelled)

- 19. The system of claim 17, further including a healthcare facility, wherein said healthcare facility is adapted to access the output of said medical application.
- 20. The system of claim 17, wherein said medical application center also stores administrative applications.
- 21. A remotely accessible centralized data storage system for mobile medical imaging, said system comprising:

a mobile imaging unit including medical imaging equipment, wherein said mobile imaging unit is a mobile facility adapted to be used at a plurality of locations;

a data center storing medical information in electronic form; and

- a mobile imaging unit/data center communication interface allowing medical information to be transmitted between said mobile imaging unit and said data center.
- 22. The system of claim 21, further comprising a healthcare facility and a healthcare facility/data center communication interface allowing medical information transmission between said data center and said healthcare facility.
- 23. The system of claim 22, further comprising an authentication module for authorizing access to said data center from at least one of said healthcare facility and said mobile imaging unit.
- 24. A method for remotely storing medical information, said method comprising:

transmitting medical information collected from a patient at a mobile imaging unit to a data center, wherein said mobile imaging unit is a mobile facility adapted to be used at a plurality of locations; and

storing said medical information at said data center.

- 25. The method of claim 24, wherein said step of storing includes authenticating access to said data center.
- 26. The method of claim 24, further comprising the step of retrieving said medical information from said data center.
- 27. The method of claim 26, wherein the step of retrieving includes authenticating access to said data center.
- 28. A method of communicating between a mobile imaging unit and a healthcare facility, said method comprising:

transmitting information from said mobile imaging unit to a data center, wherein said mobile imaging unit is a mobile facility adapted to be used at a plurality of locations; and

retrieving said information from said data center at said healthcare facility.

- 29. A system for communication between a mobile imaging unit and a healthcare facility, said system comprising:
- a mobile imaging unit capable of transmitting medical diagnostic information, wherein said mobile imaging unit is a mobile facility adapted to be used at a plurality of locations;
- a data center capable of receiving said medical diagnostic information, storing said medical diagnostic information, and transmitting said medical diagnostic information; and
- a healthcare facility capable of accessing said medical diagnostic information from said data center.
- 30. The system of claim 29, wherein said data center is further capable of storing medical applications and executing medical applications.

- 31. The system of claim 30, wherein said mobile imaging unit is further capable of executing medical applications via said data center.
- 32. The system of claim 30, wherein said healthcare facility is further capable of executing medical applications via said data center.
- 33. A method for remotely accessing medical information, said method comprising:

accessing a data center from a mobile imaging unit at a remote location, wherein said mobile imaging unit is a mobile facility adapted to be used at a plurality of locations; and

retrieving medical information from said data center.

- 34. The method of claim 33, wherein said step of accessing includes authenticating access to said data center.
- 35. The method of claim 28, further comprising remotely analyzing said information at said data center via at least one of said mobile imaging unit and said healthcare facility.
- 36. The method of claim 28, further comprising aggregating data from a plurality of geographic locations at said data center using at least one of said mobile imaging unit and said healthcare facility.

### **EVIDENCE APPENDIX**

The following evidence is attached to this appeal brief as an evidence appendix:

- 1. Evidence Appendix A Specification and Figures of Application filed on March 15, 2001, and published on October 3, 2002.
- 2. Evidence Appendix B Final Office Action mailed on April 14, 2006.
- 3. Evidence Appendix C U.S. Patent No. 5,891,035 by Wood ("Wood '035").
- 4. Evidence Appendix D Office Action Response filed on February 8, 2006.
- 5. Evidence Appendix E Office Action Response filed on June 14, 2006.
- 6. Evidence Appendix F Advisory Action mailed July 5, 2006.
- 7. Evidence Appendix G U.S. Patent No. 5,924,074 by Evans ("Evans").
- 8. Evidence Appendix H U.S. Patent No. 5,851,186 by Wood ("Wood '186").
- 9. Evidence Appendix I U.S. Patent No. 6,678,703 by Rothschild ("Rothschild").

## RELATED PROCEEDINGS APPENDIX

Not Applicable.



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FII	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/681,306 03/15/2001		3/15/2001	Thanos Karras	13033US01	9546
23446	7590	04/14/2006		EXAM	INER
MCANDR	EWS HEL	D & MALLOY, L	BLECK, CAROLYN M		
500 WEST I SUITE 3400		STREET	ART UNIT	PAPER NUMBER	
CHICAGO,		l	3626		
				DATE MAILED: 04/14/200	6

Please find below and/or attached an Office communication concerning this application or proceeding.

•	Application No.	Applicant(s)					
	09/681,306	KARRAS ET AL.					
Office Action Summary	Examiner	Art Unit					
	Carolyn M. Bleck	3626					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
1) Responsive to communication(s) filed on 08 Fe	Responsive to communication(s) filed on <u>08 February 2006</u> .						
2a)⊠ This action is <b>FINAL</b> . 2b)☐ This							
3) Since this application is in condition for allowan	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims							
4) Claim(s) 1,3-9,11-14,16,17 and 19-36 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  5) Claim(s) is/are allowed.  6) Claim(s) 1, 3-9, 11-14, 16-17, and 19-36 is/are rejected.  7) Claim(s) is/are objected to.  8) Claim(s) are subject to restriction and/or election requirement.							
Application Papers							
9) The specification is objected to by the Examiner.  10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.S.C. § 119							
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>							
Attachment(s)    Notice of References Cited (PTO-892)   Notice of Draftsperson's Patent Drawing Review (PTO-948)   Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)   Paper No(s)/Mail Date	4) Interview Summary ( Paper No(s)/Mail Dat 5) Notice of Informal Pa 6) Other:	e					

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### **DETAILED ACTION**

### Notice to Applicant

1. This communication is in response to the amendment filed on 8 February 2006. Claims 1, 3-9, 11-14, 16-17, and 19-36 are pending. Claims 2, 10, 15, and 18 have been cancelled. Claims 1, 5, 7-9, 11, 13-14, 17, 19, 21, 24, 26, 28-29, and 33 have been amended.

### Claim Objections

2. Claim 5, line 3, is objected to because of the following informalities: "generated" appears to be grammatically incorrect. Appropriate correction is requested.

### Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 21-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Wood et al. (5,891,035).

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(A) As per claim 21, Wood discloses an ultrasonic diagnostic imaging system that is capable of accessing images and information from internal or external database over the Internet (Abstract) comprising:

- (a) an ultrasound system which processes information to form ultrasonic images, wherein there are a plurality of ultrasound systems having wheels (Fig. 2, #200, #202) (Fig. 1-3, col. 2 line 60 to col. 3 line 10, col. 10 lines 43-56) (It is noted that an "ultrasound system" having wheels as is shown in Figure 2 is a "mobile facility" that is capable of being moved to a plurality of locations);
- (b) a hospital information system or radiology information system for storing patient and physician data (Fig. 1-3, col. 2 lines 20-50, col. 2 line 60 to col. 3 line 10); and
- (c) a modem for connecting to information sources, such as the ultrasound system (200) and the hospital information system (HIS) or radiology information system (RIS) (500), over the network, wherein patient and physician data is transmitted between the ultrasound system and the HIS/RIS, and the HIS/RIS is able to acquire information from the ultrasound system (reads on "mobile imaging unit/data center communication interface") (Fig. 1-3, col. 2 lines 20-50, col. 9 lines 40-65, col. 10 lines 44-56).
- (B) As per claim 22, Wood discloses a modem for connecting to information sources, such as a ultrasound operator (202) in a practice and the hospital information system (HIS) or radiology information system (RIS) (500), over the network, wherein patient and

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physician data is transmitted between the ultrasound operator using a browser and the HIS/RIS (Fig. 1-3, col. 2 lines 20-50, col. 2 line 60 to col. 3 line 37, col. 9 lines 40-65, col. 10 lines 44-56).

### Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 1, 4-5, 7-9, 11, 13-14, and 33-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evans (5,924,074) in view of Wood et al. (5,851,186).
- (A) As per claim 1, Evans discloses a medical records system that is accessible to remotely located health care providers (Abstract; col. 12 line 55 to col. 13 line 30) comprising:
- (a) a point of care system to capture patient data at a point of care, wherein the health care provider is able to enter, review, annotate, analyze, and process patient data using the point of care system, wherein the patient data that is entered using the point of care system is stored in the patient data repository in a patient record (col. 4 line 64 to col. 5 line 28, col. 6 lines 9-36, col. 16 lines 2-16) (It is noted that entering data into a point of care system is considered to be a form of "a data generator for generating medical data storable in a data center");

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(b) at least one point of care system (see the plurality of healthcare providers in Fig. 24, 416-420) for accessing and retrieving patient data from the patient data repository, wherein the point of care system issues a request for patient data, wherein the patient locator receives the request from the point of care system and communicates a patient ID (PID) to the data manager which locates the patient record using the PID, wherein the data manager delivers the requested data to the point of care system (Fig. 24, col. 3 lines 17-23, col. 8 line 61 to col. 9 line 13, col. 9 lines 37-60, col. 14 line 64 to col. 15 line 7, col. 18 lines 43-50) (It is noted that the point of care system of Evans is considered to be a form of "at least one data retriever"); and

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(c) a patient data repository for storing and organizing patient data for access by the point of care system, wherein the point of care systems access the patient data repository from any geographical location, wherein for example, a point of care system used by a healthcare provider in Boston is able to access data on a server at Scripps Health (Fig. 24, col. 4 line 64 to col. 5 line 7, col. 13 lines 19-30, col. 14 line 64 to col. 15 line 2, col. 16 lines 44-53).

Evans discloses having data in a patient record captured by the point of care system and incorporated from external sources (e.g., a digital x-ray image file stored in raster pixel format) (col. 8 lines 29-38). However, Evans fails to expressly disclose that the data generator is a mobile imaging unit, wherein the mobile imaging unit is a mobile facility adapted to be used at a plurality of locations.

Wood discloses an ultrasound system accessible by a remotely located personal computer, wherein the ultrasound system forms ultrasonic images, which are stored in

an image store, wherein the ultrasound system, wherein there are a plurality of ultrasound systems having wheels (Fig. 1, 15-17, col. 2 line 60 to col. 3 line 20, col. 12 line 66 to col. 13 line 26, col. 15 lines 23-43). It is noted that an "ultrasound system" having wheels as is shown in Figure 15-17 is a "mobile facility" that is capable of being moved to a plurality of locations.

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to include the features of Wood within the system of Evans with the motivation of allowing remotely located healthcare providers to access patient data (Evans; col. 1 lines 63-66), including diagnostic data gathered through ultrasound systems (Wood; col. 1 lines 52-57).

- (B) As per claim 4, Evans discloses the point of care system for accessing data being used by a healthcare provider in a healthcare facility, such as a hospital (Fig. 24, col. 5 lines 12-20, col. 12 line 55 to col. 13 line 30).
- (C) As per claim 5, Evans discloses a point of care system to capture patient data at a point of care, such as in a hospital (reads on "health care facility"), wherein the health care provider is able to enter, review, annotate, analyze, and process patient data using the point of care system, wherein the patient data that is entered using the point of care system is stored in the patient data repository in a patient record (col. 4 line 64 to col. 5 line 28, col. 6 lines 9-36, col. 16 lines 2-16) (It is noted that entering data into a point of

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care system is considered to be a form of "a data generator for generating medical data storable in a data center").

(D) As per claims 7 and 8, Evans does not expressly discloses the data generator generating medical images and medical reports.

Wood discloses the ultrasound system generating images and reports (See Fig. 1, reference numbers 22, 24a-b, Fig. 4-5, col. 2 line 60 to col. 3 line 20, col. 9 lines 54-59, col. 10 lines 13-26, col. 15 lines 23-33).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to include the features of Wood within the system of Evans with the motivation of allowing remotely located healthcare providers to access patient data (Evans; col. 1 lines 63-66), including diagnostic and image data and reports gathered through ultrasound systems (Wood; col. 1 lines 43-57).

- (E) Claim 9 repeats the limitations of claim 1, and is therefore rejected for the same reasons as claim 1. As per the recitation of the "mobile imaging unit" being geographically distinct from the data center, Wood discloses in Fig. 15-17 that the ultrasound systems are in different locations from the centralized server (col. 13 line 29 to col. 14 line 40).
- (F) Claim 11 repeats the limitations of claims 4-5, and is therefore rejected for the same reasons as claims 4-5, and incorporated herein.

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- (G) Claim 13 repeats the limitations of claim 1, and is therefore rejected for the same reasons as claim 1, and incorporated herein.
- (H) Claim 14 repeats the limitations of claims 4 and 5, and is therefore rejected for the same reasons as those claims, and incorporated herein.
- (I) As per claim 33, Evans discloses a method for remotely accessing patient data (Abstract; col. 2 lines 45-64) comprising:
- (a) accessing a patient data repository by a remotely located point of care system (i.e., from any geographical location) (Fig. 24, col. 2 lines 45-64, col. 2 line 65 to col. 3 line 3, col. 4 line 64 to col. 5 line 28, col. 13 lines 23-30); and
- (b) retrieving patient data from the patient data repository (Fig. 24, col. 3 lines 17-23, col. 8 line 61 to col. 9 line 13, col. 9 lines 37-60, col. 14 line 64 to col. 15 line 7, col. 18 lines 43-50).

Evans fails to expressly disclose "a mobile imaging unit," "wherein the mobile imaging unit is a mobile facility adapted to be used at a plurality of locations."

Wood discloses an ultrasound system accessible by a remotely located personal computer, wherein the ultrasound system forms ultrasonic images, which are stored in an image store, wherein the ultrasound system, wherein there are a plurality of ultrasound systems having wheels (Fig. 1, 15-17, col. 2 line 60 to col. 3 line 20, col. 12 line 66 to col. 13 line 26, col. 15 lines 23-43). It is noted that an "ultrasound system"

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having wheels as is shown in Figure 15-17 is a "mobile facility" that is capable of being

moved to a plurality of locations.

At the time the invention was made, it would have been obvious to one of

ordinary skill in the art to include the features of Wood within the system of Evans with

the motivation of allowing remotely located healthcare providers to access patient data

(Evans; col. 1 lines 63-66), including diagnostic data gathered through ultrasound

systems (Wood; col. 1 lines 52-57).

(J) As per claim 34, Evans discloses the step of accessing patient data in the patient

data repository of the electronic medical records system including providing several

levels of security to access patient data by using a tiered password system, wherein a

system administrator may have global password access to any patient data whereas a

physician may have only access to patient records within their specialty (Fig. 1, col. 4

line 64 to col. 5 line 27, col. 15 lines 20-32). It is noted that Evan's tiered password

system is considered to be a form of "authenticating access to the data center."

7. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Evans

(5,924,074) and Wood et al. (5,851,186) as applied to claim 1 above, and further in view

of Wood et al. (5,891,035).

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(A) As per claim 3, Evans discloses the point of care system for accessing data being a desktop computer, laptop computer, or wireless pen computer (Fig. 24, col. 13 lines 12-15).

Evans and Wood fails to expressly disclose the data retriever comprising a mobile imaging unit.

Wood ('035) discloses an ultrasound system having direct access through a browser to pull ultrasound images, diagnostic images, or other patient and physician data located on other systems (Fig. 2, col. 2 lines 20-49, col. 8 lines 57-65, col. 9 line 65 to col. 10 line 22).

At the time the invention was made, it would have been obvious to include the features of Wood within the system of Evans with the motivation of providing a system operator with the ability to pull remotely located information into an ultrasound system to aid in an examination (Wood ('035); col. 1 lines 30-41).

- 8. Claims 6, 12, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evans (5,924,074) and Wood et al. (5,851,186) as applied to claims 1, 9, and 13 above, and further in view of Rothschild et al. (6,678,703).
- (A) As per claim 6, Evans and Wood fail to expressly disclose the data center being an application service provider (ASP).

Rothschild discloses a medical image management system that uses a central data management system to store and transmit electronic records containing medical

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images, wherein the central data management system is an ASP (Abstract, Fig. 1, col. 6 lines 17-21, col. 19 lines 20-31, col. 19 lines 48-58, col. 21 lines 9-16).

At the time the invention was made, it would have been obvious to include the features of Rothschild within the system of Evans with the motivation of reducing the costs associated with maintaining image management facilities onsite by providing an application service provider that is able to manage the medical images off site and without a large capital expenditure on computer hardware or software (Rothschild; col. 4 lines 51-63; col. 7 lines 38-67).

- (B) Claims 12 and 16 repeat the same limitations as claim 6, and are therefore rejected for the same reasons as claim 6, and incorporated herein.
- 9. Claims 17 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Background of the Invention (pages 1-4 of the specification filed on 3/15/01) in view of Rothschild et al. (6,678,703).
- (A) As per claim 17, Applicant's Background of the Invention discloses a remotely accessible application service provider (ASP) system (page 2, par. 5) comprising:
- (a) a data center including at least one application, said data center including computing power for accessing applications (pages 2-3, par. 5-6); and
- (b) a mobile imaging unit wherein said mobile imaging unit is a mobile facility adapted to be used at a plurality of locations (pages 1-2, par. 2-4).

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The Applicant's Background of the Invention does not expressly disclose the application being "at least one medical application" or that the mobile imaging unit "accessing the output of medical applications."

Rothschild discloses downloading software programs (reads on "applications") from a website associated with the central data management system or ASP and running the programs on a personal computer, wherein these software programs are used to view, display, and manipulate received medical images (col. 17 line 58 to col. 18 line 7, col. 21 lines 8-12, col. 24 lines 4-37). It is noted that viewing, displaying, and manipulating medical images via software programs is considered to be a form of "accessing the output of the medical application." Rothschild discloses the local image workstation connected to the medical imaging system (reads on "mobile imaging unit") having local ASP software from the ASP (Fig. 1, col. 27 line 60 to col. 28 line 31), wherein the local image workstation is able to directly access images from their own local image workstation or access images in the central storage system (Fig. 1, col. 28 line 52 to col. 29 line 4), and wherein viewing the images is done through software downloaded from the central data management system (col. 24 lines 5-28). It is respectfully submitted that because a local image workstation connected to a medical imaging system is able to view their own images or access images in the central storage system, and in order to view the images viewing software is downloaded from a central system, it appears that Rothschild teaches a form of a mobile imaging unit accessing output (the images") from a medical application (software downloaded).

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At the time the invention was made, it would have been obvious to one of ordinary skill in the art to include the features of Rothschild within the system described in Applicant's Background of the Invention with the motivation of providing a means for all radiologists and referring doctors to view images regardless of if they have viewing software on their personal computers (see Rothschild; col. 24 lines 5-23).

(B) As per claim 19, Rothschild discloses radiologists, referring doctors, and image centers downloading software (reads on "healthcare facility") (col. 17 line 58 to col. 18 line 7, col. 21 lines 8-12, col. 24 lines 4-37).

The motivation for including the features of Rothschild within the system described in Applicant's Background of the Invention is given above in claim 17, and incorporated herein.

- (C) As per claim 20, Applicant's Background of the Invention discloses the ASP may host, maintain, and deliver (reads on "storing") applications such as email systems, resource planning systems, customer relationship management systems, human resource management systems, and proprietary applications (reads on "administrative applications") to remote clients from the ASP's off-site data center (pages 2-3, par. 5-7).
- 10. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wood et al. (5,891,035) as applied to claim 21 above, and further in view of Evans (5,924,074).

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- (A) As per claim 23, Wood does not expressly disclose an authentication module for authorizing access to the data center from at least one of the healthcare facility and the mobile imaging unit. Evans discloses accessing (reads on "retrieving") and updating patient data in the patient data repository (reads on "storing") of the electronic medical records system including authorizing health care providers and providing several levels of security to access patient data by using a tiered password system, wherein a system administrator may have global password access to any patient data whereas a physician may have only access to patient records within their specialty (Fig. 1, col. 4 line 64 to col. 5 line 27, col. 14 line 64 to col. 15 line 7, col. 15 lines 20-32). It is noted that Evan's tiered password system is considered to be a form of "an authentication module for authorizing access to the data center." At the time the invention was made, it would have be have been obvious to one of ordinary skill in the art to include the features of Evans within the method of Wood with the motivation of ensuring the security of patient data (Evans; col. 15 lines 20-32).
- 11. Claims 24-32 and 35-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evans (5,924,074) in view of Rothschild et al. (6,678,703) and Wood et al. (5,891,035).
- (A) As per claim 24, Evans discloses a method for storing patient data in a patient data repository that is accessible from any geographic location (col. 2 line 45 to col. 3 line 3) comprising:

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- (a) capturing patient data using a point of care system at the point of care of a patient and communicating over a network, such as the Internet (Fig. 24) the patient data to patient data repository (It is noted that capturing and communicating patient data over a network to the patient data repository is considered to be a form of "transmitting medical information") (Fig. 1, col. 2 line 65 to col. 3 line 23, col. 5 line 64 to col. 6 line 27, col. 12 line 54 to col. 13 line 56); and
- (b) storing the patient data at the patient data repository (Fig. 24, col. 4 line 64 to col. 5 line 7, col. 13 lines 19-30, col. 14 line 64 to col. 15 line 2, col. 16 lines 44-53).

Evans fails to expressly disclose "a mobile imaging unit" transmitting the information to the data center. Rothschild discloses a medical imaging system (10) that pushes medical images to the central data management system (Fig. 1, col. 18 lines 28-55).

At the time the invention was made, it would have be have been obvious to one of ordinary skill in the art to include the features of Rothschild within the method of Evans with the motivation of providing immediate electronic delivery and convenient, economic storage of radiologic and other medical images in a location that is accessible over the Internet (Rothschild; col. 1 lines 28-31, col. 2 lines 1-7).

Evans and Rothschild do not expressly disclose that the "mobile imaging unit is a mobile facility adapted to be used at a plurality of locations."

Wood discloses an ultrasound system which processes information to form ultrasonic images, wherein there are a plurality of ultrasound systems having wheels (Fig. 2, #200, #202) (Fig. 1-3, col. 2 line 60 to col. 3 line 10, col. 10 lines 43-56) (It is

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noted that an "ultrasound system" having wheels as is shown in Figure 2 is a "mobile facility" that is capable of being moved to a plurality of locations).

At the time the invention was made, it would have be have been obvious to one of ordinary skill in the art to include the features of Wood within the method taught collectively by Evans and Rothschild with the motivation of allowing physicians and ultrasound operators to communicate with each other from different locations (Wood; col. 1 line 55 to col. 2 line 7).

- (B) As per claims 25 and 27, Evans discloses that accessing (reads on "retrieving") and updating patient data stored in the patient data repository (reads on "storing") of the electronic medical records system includes authorizing health care providers and providing several levels of security to access patient data by using a tiered password system, wherein a system administrator may have global password access to any patient data whereas a physician may have only access to patient records within their specialty (Fig. 1, col. 4 line 64 to col. 5 line 27, col. 14 line 64 to col. 15 line 7, col. 15 lines 20-32). It is noted that Evan's tiered password system is considered to be a form of "authenticating access to the data center."
- (C) As per claim 26, Evans discloses at least one point of care system (see the plurality of healthcare providers in Fig. 24, 416-420) for accessing and retrieving patient data from the patient data repository, wherein the point of care system issues a request for patient data, wherein the patient locator receives the request from the point of care

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system and communicates a patient ID (PID) to the data manager which locates the patient record using the PID, wherein the data manager delivers the requested data to the point of care system (Fig. 24, col. 3 lines 17-23, col. 8 line 61 to col. 9 line 13, col. 9 lines 37-60, col. 14 line 64 to col. 15 line 7, col. 18 lines 43-50).

- (D) As per claim 28, Evans discloses a method for storing patient data in a patient data repository that is accessible from any geographic location (col. 2 line 45 to col. 3 line 3) comprising:
- (a) capturing patient data using a point of care system at the point of care of a patient and communicating over a network, such as the Internet (Fig. 24) the patient data to patient data repository (It is noted that capturing and communicating patient data over a network to the patient data repository is considered to be a form of "transmitting medical information") (Fig. 1, col. 2 line 65 to col. 3 line 23, col. 5 line 64 to col. 6 line 27, col. 12 line 54 to col. 13 line 56); and
- (b) retrieving patient data from the patient data repository at a point of care system located in a hospital (Fig. 24, col. 3 lines 17-23, col. 5 lines 12-20, col. 8 line 61 to col. 9 line 13, col. 9 lines 37-60, col. 14 line 64 to col. 15 line 7, col. 18 lines 43-50).

Evans fails to expressly disclose "a mobile imaging unit" transmitting the information to the data center. Rothschild discloses a medical imaging system (10) that pushes medical images to the central data management system (Fig. 1, col. 18 lines 28-55).

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At the time the invention was made, it would have be have been obvious to one of ordinary skill in the art to include the features of Rothschild within the method of Evans with the motivation of providing immediate electronic delivery and convenient, economic storage of radiologic and other medical images in a location that is accessible over the Internet (Rothschild; col. 1 lines 28-31, col. 2 lines 1-7).

Evans and Rothschild do not expressly disclose that the "mobile imaging unit is a mobile facility adapted to be used at a plurality of locations."

Wood discloses an ultrasound system which processes information to form ultrasonic images, wherein there are a plurality of ultrasound systems having wheels (Fig. 2, #200, #202) (Fig. 1-3, col. 2 line 60 to col. 3 line 10, col. 10 lines 43-56) (It is noted that an "ultrasound system" having wheels as is shown in Figure 2 is a "mobile facility" that is capable of being moved to a plurality of locations).

At the time the invention was made, it would have be have been obvious to one of ordinary skill in the art to include the features of Wood within the method taught collectively by Evans and Rothschild with the motivation of allowing physicians and ultrasound operators to communicate with each other from different locations (Wood; col. 1 line 55 to col. 2 line 7).

- (E) As per claim 29, Evans discloses a system for communication between a point of care system and a health care facility (Fig. 24) comprising:
- (a) a point of care system for capturing patient data, such as patient history and results of an examination useful for making a diagnosis (reads on "medical diagnostic

information") at the point of care of a patient and communicating over a network, such as the Internet (Fig. 24), the patient data to the patient data repository (It is noted that capturing and communicating patient data over a network to the patient data repository is considered to be a form of "transmitting medical diagnostic information") (Fig. 1, col. 2 line 65 to col. 3 line 23, col. 5 line 64 to col. 6 line 27, col. 12 line 54 to col. 13 line 56);

- (b) a patient data repository for receiving annotated and updated patient data from the point of care system, storing the patient data, and communicating the patient data over a network (Fig. 12, 24, col. 4 line 64 to col. 5 line 7, col. 13 lines 19-30, col. 14 line 64 to col. 15 line 2, col. 16 lines 44-53); and
- (c) a health care facility, such as a healthcare provider in Boston, for accessing patient data from the patient data repository (Fig. 24, col. 13 lines 23-30).

Evans fails to expressly disclose "a mobile imaging unit" transmitting the information to the data center. Rothschild discloses a medical imaging system (10) that pushes medical images to the central data management system (Fig. 1, col. 18 lines 28-55).

At the time the invention was made, it would have be have been obvious to one of ordinary skill in the art to include the features of Rothschild within the method of Evans with the motivation of providing immediate electronic delivery and convenient, economic storage of radiologic and other medical images in a location that is accessible over the Internet (Rothschild; col. 1 lines 28-31, col. 2 lines 1-7).

Evans and Rothschild do not expressly disclose that the "mobile imaging unit is a mobile facility adapted to be used at a plurality of locations."

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Wood discloses an ultrasound system which processes information to form ultrasonic images, wherein there are a plurality of ultrasound systems having wheels (Fig. 2, #200, #202) (Fig. 1-3, col. 2 line 60 to col. 3 line 10, col. 10 lines 43-56) (It is noted that an "ultrasound system" having wheels as is shown in Figure 2 is a "mobile facility" that is capable of being moved to a plurality of locations).

At the time the invention was made, it would have be have been obvious to one of ordinary skill in the art to include the features of Wood within the method taught collectively by Evans and Rothschild with the motivation of allowing physicians and ultrasound operators to communicate with each other from different locations (Wood; col. 1 line 55 to col. 2 line 7).

(F) As per claim 30, Rothschild discloses a website associated with the central data management system having programs that are capable of being downloaded (reads on "capable of storing medical applications") (col. 17 line 58 to col. 18 line 7, col. 21 lines 8-12, col. 24 lines 4-37). The Examiner respectfully submits that if these programs are downloadable from a website associated with the central data management system, they would also be "capable of" being executed by the servers associated with the central data management system (Fig. 1, col. 21 lines 9-17, col. 17 line 58 to col. 18 line 7, col. 21 lines 8-12, col. 24 lines 4-37). The motivation for including the features of Rothschild within the system described in Applicant's Background of the Invention is given above in claim 29, and incorporated herein.

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(G) As per claim 31, Rothschild discloses the local image workstation connected to the medical imaging system (reads on "mobile imaging unit") having local ASP software from the ASP for performing their role in integrating the storage and communication of images using workflow software (Fig. 1, col. 27 line 60 to col. 28 line 31), wherein the local image workstation is able to directly access images from their own local image workstation or access images in the central storage system (Fig. 1, col. 28 line 52 to col. 29 line 4), and wherein viewing the images is done through software downloaded from the central data management system (col. 24 lines 5-28). It is respectfully submitted that because a local image workstation connected to a medical imaging system has its own local ASP software, this is considered to be a form of "executing medical applications via said data center." The motivation for including the features of

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(H) As per claim 32, Rothschild discloses downloading software programs by a radiologist, imaging center, or referring doctor from a website associated with the central data management system or ASP (reads on "data center") and running the programs on a personal computer, wherein these software programs are used to view, display, and manipulate received medical images (col. 17 line 58 to col. 18 line 7, col. 21 lines 8-12, col. 24 lines 4-37). The motivation for including features of Rothschild within Evans is given above in claim 29, and incorporated herein.

Rothschild within the system described in Applicant's Background of the Invention is

given above in claim 29, and incorporated herein.

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(I) As per claim 35, Evans discloses analyzing patient data patient records stored in the

patient data repository via the point of care system (reads on "health care facility"),

wherein the point of care system is remote from the patient data repository (Fig. 24, col.

4 line 64 to col. 5 line 28).

(J) As per claim 36, Evans discloses organizing and storing patient data from a plurality

of geographic locations at the patient data repository using a point of care system in a

hospital, wherein the patient is able to access and update patient information stored in

the patient data repository (Fig. 24, col. 2 line 45 to col. 3 line 16, col. 14 line 64 to col.

15 line 7).

Response to Arguments

12. Applicant's arguments filed 8 February 2006 have been fully considered but they

are not persuasive. Applicant's arguments will be addressed in the order in which they

appear in the response filed 8 February 2006.

(A) At pages 9-14 of the response filed 8 February 2006, Applicant argues that the

applied prior art fails to teach the newly added features.

In response, all of the limitations which Applicant disputes as missing in the

applied references, including the features newly added in the 8 February 2006

amendment, have been fully addressed by the Examiner as either being fully disclosed

or obvious in view of the collective teachings of Wood, Evans, Rothschild, and/or

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Applicant's Background of the Invention, based on the logic and sound scientific reasoning of one ordinarily skilled in the art at the time of the invention, as detailed in the remarks and explanations given in the preceding sections of the present Office Action, and incorporated herein.

It is noted that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In addition, it is respectfully submitted that the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

(B) At pages 9-10 of the response filed 8 February 2006, Applicant argues that Wood "035 fails to teach "using the ultrasound system at more than one healthcare facility" or "a mobile imaging unit adapted to be used at a plurality of locations."

First, in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "using the ultrasound system at more than one healthcare facility" or a mobile imaging unit that is "mobile beyond the confines of a room or single healthcare facility") are not recited in the rejected claim(s). Although the claims are interpreted in light of

re Van Geuns, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

the specification, limitations from the specification are not read into the claims. See In

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Second, in response to applicant's argument that "the mobile imaging unit is adapted to be used at a plurality of locations," a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior

art. If the prior art structure is capable of performing the intended use, then it meets the

claim.

In this case, Wood '035 teaches a plurality of ultrasound systems having wheels (See Figure 2). The ultrasound systems of Wood are mobile imaging units that are "adapted to be used" at a plurality of locations. It is unclear to the Examiner how an ultrasound system having wheels is not able to be "moved beyond the confines of a room or single healthcare facility." As such, Wood is capable of performing the intended use that is recited in claim 21. It is suggested that if there is a difference between Applicant's claimed "mobile imaging unit" and the teachings of the Wood reference, that Applicant focus on the structural differences between the two systems rather than on the use of the system.

Third, it is noted that in Applicant's specification at page 1, Applicant describes a mobile imaging unit as equipment such as "MR, CT, and the like to facilitate medical examination of patients." Wood's teachings of an ultrasound system are a form of Applicant's mobile imaging unit based on the description in Applicant's specification.

Because Applicant has not provided a strict definition of a "mobile imaging unit" within

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the specification, the Examiner has given the claim language the broadest interpretation and has applied art accordingly.

(C) At pages 10-11 and 13, Applicant argues that Wood '186 fails to teach "using the ultrasound system at more than one healthcare facility" or "a mobile imaging unit adapted to be used at a plurality of locations" as recited in claim 1.

First, in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "using the ultrasound system at more than one healthcare facility" or a mobile imaging unit that is "mobile beyond the confines of a room or single healthcare facility") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Second, in response to applicant's argument that "the mobile imaging unit is adapted to be used at a plurality of locations," a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

In this case, Wood '186 teaches a plurality of ultrasound systems having wheels (See Figures 15-17). The ultrasound systems of Wood are mobile imaging units that are "adapted to be used" at a plurality of locations. It is unclear to the Examiner how an

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ultrasound system having wheels is not able to be "moved beyond the confines of a room or single healthcare facility." As such, Wood is capable of performing the intended use that is recited in claim 1. It is suggested that if there is a difference between Applicant's claimed "mobile imaging unit" and the teachings of the Wood reference, that Applicant focus on the structural differences between the two systems rather than on the use of the system.

Third, it is noted that in Applicant's specification at page 1, Applicant describes a mobile imaging unit as equipment such as "MR, CT, and the like to facilitate medical examination of patients." Wood's teachings of an ultrasound system are a form of Applicant's mobile imaging unit based on the description in Applicant's specification. Because Applicant has not provided a strict definition of a "mobile imaging unit" within the specification, the Examiner has given the claim language the broadest interpretation and has applied art accordingly.

In response to Applicant's arguments at pages 11-12 discussing the rejections of claims 6, 12, and 16, it is noted that Rothschild was not relied on for teaching "mobile imaging units." The Examiner relied on Wood '186 for this teaching, which is discussed in the preceding paragraphs of this section.

(D) At pages 12-13, Applicant argues that there is no motivation to combine Applicant's Background of the Invention with Rothschild because Rothschild does not teach mobile imaging units.

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....

In response, it is respectfully submitted that Rothschild was not relied on for teaching "mobile imaging units." In addition, in response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the Examiner has provided a motivation directly from the references themselves. Note the motivation provided in the rejection of claim 17 "providing a means for all radiologists and referring doctors to view images regardless of if they have viewing software on their personal computers (see Rothschild; col. 24 lines 5-23)."

- (E) Applicant's arguments related to claim 23 on page 13 of the response filed 8

  February 2006 rehash or rely on the same arguments discussed in section A above.
- (F) Applicant's arguments on pages 13-14 related to claims 24, 28, and 29 rehash or rely on the same arguments discussed in section A above. It is noted that neither Evans nor Rothschild were relied on for teaching the feature of "mobile imaging units." The Examiner relied on Wood '035.

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#### Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carolyn Bleck whose telephone number is (571) 272-6767. The Examiner can normally be reached on Monday-Thursday, 8:00am – 5:30pm, and from 8:30am – 5:00pm on alternate Fridays.

14. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Thomas can be reached at (571) 272-6776.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

# 15. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks Washington, D.C. 20231

# Or faxed to:

(571) 273-8300	[Official communications]
(571) 273-8300	[After Final communications labeled "Box AF"]
(571) 273-6767	[Informal/ Draft communications, labeled "PROPOSED" or "DRAFT"]

Hand-delivered responses should be brought to the Knox Building, Alexandria, VA.

April 6, 2006

SUPERVISORY PATENT EXAMINER

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# FEB 0 8 2006

Attorney Docket No.: 15-IS-5713 (13033US01)

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the Application of:

Thanos Karras

Examiner: Bleck, Carolyn M.

Serial No.:

09/681,306

Group Art Unit: 3626

Filed:

March 15, 2001

Conf. No.: 9546

For:

INTEGRATION OF MOBILE

IMAGING UNITS INTO AN

APPLICATION SERVICE PROVIDER

FOR DATA STORAGE AND

INFORMATION SYSTEM SUPPORT

#### CERTIFICATION OF FACSIMILE TRANSMISSION

I hereby certify that this correspondence is being facsimile transmitted to the Patent and Trademark Office (FAX No. (571) 273-8300) on February 8, 2006.

Adam J. Faier

Signature

#### AMENDMENT

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Examiner Bleck:

This Amendment is being submitted in response to the Office Action mailed January 25, 2006. This Amendment is timely because it is being submitted within the three-month period for response ending April 25, 2006. The Applicant requests that this Amendment be entered and considered.

#### AMENDMENTS TO THE CLAIMS

- 1. (Currently Amended) A remotely accessible centralized medical information system, said system comprising:
- a data generator mobile imaging unit for generating medical data storable in a data center, wherein said mobile imaging unit is a mobile facility adapted to be used at a plurality of locations;
  - at least one data retriever for retrieving data from a data center; and
- a data center for storing data, said data center accessible from said at least one data retriever, said at least one data retriever located at at least one distinct geographic retrieval point.
  - 2. (Cancelled)
- 3. (Original) The system of claim 1, wherein said data retriever comprises a mobile imaging unit.
- 4. (Original) The system of claim 1, wherein said data retriever comprises a healthcare facility.
- 5. (Currently Amended) The system of claim 1, wherein said data generator emprises further including a healthcare facility, wherein said healthcare facility is adapted to generated medical data storable in said data center.
- 6. (Original) The system of claim 1, wherein said data center comprises an application service provider.
- 7. (Currently Amended) The system of claim 1, wherein said data generator mobile imaging unit generates medical images.
- 8. (Currently Amended) The system of claim 1, wherein said data generator mobile imaging unit generates medical reports.

- 9. (Currently Amended) A centralized medical information system, said system comprising:
- a data generator mobile imaging unit for generating data storable in a data center, wherein said mobile imaging unit is a mobile facility adapted to be used at a plurality of locations; and
- a data center for storing data, said data center geographically distinct from said data generator mobile imaging unit.

## 10. (Cancelled)

- 11. (Currently Amended) The system of claim 9, wherein said data generator comprises <u>further including</u> a healthcare facility, <u>wherein said healthcare facility is adapted to generate data storable in said data center</u>.
- 12. (Original) The system of claim 9, wherein said data center comprises an application service provider.
- 13. (Currently Amended) A centrally accessible medical information system, said system comprising:
- a data retriever mobile imaging unit for retrieving data from a data center, wherein said mobile imaging unit is a mobile facility adapted to be used at a plurality of locations; and
- a data center for storing data, said data center geographically distinct from said data retriever mobile imaging unit.
- 14. (Currently Amended) The system of claim 13, wherein said data retriever comprises <u>further including</u> a healthcare facility, wherein said healthcare facility is adapted to retrieve data from a data center.

#### 15. (Cancelled)

- 16. (Original) The system of claim 13, wherein said data center comprises an application service provider.
- 17. (Currently Amended) A remotely accessible centralized medical application service provider system, said system comprising:
- a data medical application center including at least one medical application, said data medical application center including processing power for accessing said medical application; and
- a data retriever mobile imaging unit, wherein said mobile imaging unit is a mobile facility adapted to be used at a plurality of locations, said data retriever mobile imaging unit accessing the output of said medical application.

## 18. (Cancelled)

- 19. (Currently Amended) The system of claim 17, wherein said medical application retriever comprises further including a healthcare facility wherein said healthcare facility is adapted to access the output of said medical application.
- 20. (Original) The system of claim 17, wherein said medical application center also stores administrative applications.
- 21. (Currently Amended) A remotely accessible centralized data storage system for mobile medical imaging, said system comprising:
- a mobile imaging unit including medical imaging equipment, wherein said mobile imaging unit is a mobile facility adapted to be used at a plurality of locations;
  - a data center storing medical information in electronic form; and
- a mobile imaging unit/data center communication interface allowing medical information to be transmitted between said mobile imaging unit and said data center.
- 22. (Original) The system of claim 21, further comprising a healthcare facility and a healthcare facility/data center communication interface allowing medical information transmission between said data center and said healthcare facility.

- 23. (Original) The system of claim 22, further comprising an authentication module for authorizing access to said data center from at least one of said healthcare facility and said mobile imaging unit.
- 24. (Currently Amended) A method for remotely storing medical information, said method comprising:

transmitting medical information collected from a patient at a mobile imaging unit to a data center, wherein said mobile imaging unit is a mobile facility adapted to be used at a plurality of locations; and

storing said medical information at said data center.

- 25. (Original) The method of claim 24, wherein said step of storing includes authenticating access to said data center.
- 26. (Currently Amended) The method of claim 24, further comprising the step of retrieving said medical diagnostic information from said data center.
- 27. (Original) The method of claim 26, wherein the step of retrieving includes authenticating access to said data center.
- 28. (Currently Amended) A method of communicating between a mobile imaging unit and a healthcare facility, said method comprising:

transmitting information from said mobile imaging unit to a data center, wherein said mobile imaging unit is a mobile facility adapted to be used at a plurality of locations; and retrieving said information from said data center at said healthcare facility.

- 29. (Currently Amended) A system for communication between a mobile imaging unit and a healthcare facility, said system comprising:
- a mobile imaging unit capable of transmitting medical diagnostic information, wherein said mobile imaging unit is a mobile facility adapted to be used at a plurality of locations;

a data center capable of receiving said medical diagnostic information, storing said medical diagnostic information, and transmitting said medical diagnostic information; and a healthcare facility capable of accessing said medical diagnostic information from said data center.

- 30. (Original) The system of claim 29, wherein said data center is further capable of storing medical applications and executing medical applications.
- 31. (Original) The system of claim 30, wherein said mobile imaging unit is further capable of executing medical applications via said data center.
- 32. (Original) The system of claim 30, wherein said healthcare facility is further capable of executing medical applications via said data center.
- 33. (Currently Amended) A method for remotely accessing medical information, said method comprising:

accessing a data center from a mobile imaging unit at a remote location, wherein said mobile imaging unit is a mobile facility adapted to be used at a plurality of locations; and retrieving medical information from said data center.

- 34. (Original) The method of claim 33, wherein said step of accessing includes authenticating access to said data center.
- 35. (Previously Presented) The method of claim 28, further comprising remotely analyzing said information at said data center via at least one of said mobile imaging unit and said healthcare facility.
- 36. (Previously Presented) The method of claim 28, further comprising aggregating data from a plurality of geographic locations at said data center using at least one of said mobile imaging unit and said healthcare facility.

#### REMARKS

The present application includes claims 1-36. Claims 1-36 have been rejected by the Examiner. By this Amendment, claims 1, 5, 7-9, 11, 13-14, 17, 19, 21, 24, 26, 28-29, and 33 have been amended. By this Amendment, claims 2, 10, 15, and 18 have been cancelled.

Claims 18-20 and 26 were rejected under 35 U.S.C. § 112 ¶ 2 as being indefinite for failing to particularly point out and distinctly claim the subject matter regarded as the invention.

Claims 1, 4-5, 9, 11, 13-14, 33-34 were rejected under 35 U.S.C. § 102(b) as being anticipated by Evans, U.S. Pat. No. 5,924,074 ("Evans").

Claims 21-22 were rejected under 35 U.S.C. § 102(b) as being anticipated by Wood et al., U.S. Pat. No. 5,891,035 ("Wood '035").

Claims 2, 7-8, and 10 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Evans and further in view of Wood et al, U.S. Pat. No. 5,851,186 ("Wood '186").

Claims 3 and 15 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Evans and further in view of Wood '035.

Claims 6, 12, and 16 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Evans and further in view of Rothschild et al., U.S. Pat. No. 6,678,703 ("Rothschild").

Claims 17-20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Applicant's Background and further in view of Rothschild.

Claim 23 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Wood '035 and further in view of Evans.

Claims 24-32 and 35-36 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Evans and further in view of Rothschild.

The Applicant now turns to the rejection of claims 18-20 and 26 under 35 U.S.C. § 112 ¶ 2 as being indefinite for failing to particularly point out and distinctly claim the subject matter regarded as the invention.

With regard to claims 18 and 19, the Examiner noted that "said medical application retriever" lacked proper antecedent basis. Claim 18 has been cancelled. Claim 19 has been amended and no longer recites "said medical application retriever." The Applicant respectfully submits that the Examiner's rejection has been overcome with respect to claims 18 and 19.

With regard to claim 20, the Examiner noted that "said medical application center" lacked proper antecedent basis. Independent claim 17, from which claim 20 depends, has been amended to recite "said medical application center." The Applicant respectfully submits that the Examiner's rejection has been overcome with respect to claim 20.

With regard to claim 26, the Examiner noted that "said medical diagnostic information" lacked proper antecedent basis. Claim 26 has been amended to recite "said medical information." The Applicant respectfully submits that the Examiner's rejection has been overcome with respect to claim 26.

The Applicant now turns to the rejection of claims 1, 4-5, 9, 11, 13-14, 33-34 under 35 U.S.C. § 102(b) as being anticipated by Evans. Evans generally relates to an electronic medical records system. As discussed beginning at col. 2, line 22, Evans discusses an electronic medical record system that automates and simplifies patient chart creation, maintenance, and retrieval. Evans creates and maintains all patient data electronically. As mentioned at col. 2, lines 45-47, Evans provides instant access to a patient's electronic medical record from any geographical location. That is, as clarified at col. 15, lines 18-20, Evans supports a large healthcare enterprise

distributed across a large geography as well as a single physician office. Thus, Evans addresses geographically distributed, but fixed, facilities.

Evans does not teach mobile facilities, such as, mobile imaging units. The Examiner stated in the Office Action mailed January 25, 2006, at page 8, that Evans fails to expressly disclose that a data generator is a mobile imaging unit. Similarly, at page 10, the Examiner also states that Evans fails to expressly disclose the data retriever comprising a mobile imaging unit. And again, at page 15, the Examiner states that Evans fails to expressly disclose "a mobile imaging unit" transmitting information to a data center.

Independent claim 1 has been amended to incorporate the limitation of a "mobile imaging unit" recited in claim 2, and claim 2 has been cancelled. Similarly, independent claims 9 and 13 have been amended to incorporate the limitations of corresponding dependent claims 10 and 15 to recite a "mobile imaging unit," and claims 10 and 15 have been cancelled. Independent claim 33 has similarly been amended to recite a "mobile imaging unit." Thus, as discussed above, Evans does not teach a "mobile imaging unit" as recited in independent claims 1, 9, 13, and 33. Therefore, the Applicant respectfully submits that the Examiner's rejection has been overcome and that independent claims 1, 9, 13, and 33, and corresponding dependent claims 4-5, 11, 14, and 34 are in condition for allowance.

The Applicant now turns to the rejection of claims 21-22 under 35 U.S.C. § 102(b) as being anticipated by Wood '035. Wood '035 generally relates to an ultrasonic diagnostic imaging system with data access and communications capability. Wood '035 discusses, beginning at col. 3, line 27 and as illustrated in Fig. 1, an ultrasound system including an HTTP server. The HTTP server is connected to access ultrasonic images and reports from a storage

medium and make the system's images and reports accessible to a computer, terminal, or workstation at a remote location.

Wood '035 does not teach using the ultrasound system at more than one healthcare facility. Although, in Fig. 2, an ultrasound system is illustrated on a mobile cart, there is no teaching or suggestion in Wood '035 that the ultrasound system is mobile beyond the confines of a room or single healthcare facility.

Thus, for the reasons discussed above, Wood '035 does not teach a mobile imaging unit adapted to be used at a plurality of locations as recited in amended independent claim 21. Therefore, the Applicant respectfully submits that the Examiner's rejection has been overcome and that independent claim 21, and corresponding dependent claim 22, are in condition for allowance.

The Applicant now turns to the rejection of claims 2, 7-8, and 10 under 35 U.S.C. § 103(a) as being unpatentable over Evans and further in view of Wood '186. Wood '186 relates to an ultrasonic diagnostic imaging system with universal access to diagnostic information and images. As discussed at col. 1, lines 43-48, Wood '186 discloses a medial diagnostic ultrasonic imaging system that can be remotely accessed, interrogated, or controlled from a remote location to provide information about the system's operating characteristics, patient images, and reports.

Wood '186 does not teach or suggest using the ultrasound system at more than one healthcare facility. Although Figs. 15-17, similar to Fig. 2 in Wood '035, described above, illustrate an ultrasound system on a mobile cart, there is no teaching or suggestion in Wood '186 that the ultrasound system is mobile beyond the confines of a room or single healthcare facility.

Claims 2 and 10 have been cancelled. With respect to claims 7-8, for the reasons discussed above and as acknowledged by the Examiner, Evans does not teach or suggest a "mobile imaging unit" as recited in independent claim 1, from which claims 7-8 depend. In addition, Wood '186 does not overcome at least this shortcoming of Evans because, as discussed above, Wood '186 does not teach or suggest a mobile imaging unit adapted to be used at a plurality of locations as recited in amended independent claim 1. Thus, neither Evans nor Wood '186, alone or in combination, teach or suggest elements of independent claim 1, from which claims 7-8 depend. Therefore, the Applicant respectfully submits that the Examiner's rejection has been overcome and dependent claims 7-8 are in condition for allowance.

The Applicant now turns to the rejection of claims 3 and 15 under 35 U.S.C. § 103(a) as being unpatentable over Evans and further in view of Wood '035. Claim 15 has been cancelled. With respect to claim 3, as discussed above and as acknowledged by the Examiner, Evans does not teach or suggest a "mobile imaging unit" as recited in independent claim 1, from which claim 3 depends. In addition, Wood '035 does not overcome at least this shortcoming of Evans because, as discussed above, Wood '035 does not teach or suggest a mobile imaging unit adapted to be used at a plurality of locations as recited in amended independent claim 1. Thus, neither Evans nor Wood '035, alone or in combination, teach or suggest elements of independent claim 1, from which claim 3 depends. Therefore, the Applicant respectfully submits that the Examiner's rejection has been overcome and dependent claim 3 is in condition for allowance.

The Applicant now turns to the rejection of claims 6, 12, and 16 under 35 U.S.C. § 103(a) as being unpatentable over Evans and further in view of Rothschild. Rothschild generally relates

to medical image management. Rothschild discusses, beginning at col. 17, line 66, storing images at three separate locations including locally at an imagining center and at two central data centers. In addition, images may be stored at a fourth remote viewing location. As illustrated in Fig. 1 and described beginning at col. 18, line 29, Rothschild discloses a medical image management system including a medical imaging system, a local image workstation, a central data management system, and a remote image viewing system.

Rothschild does not teach or suggest mobile facilities, such as, mobile imaging units.

Rather, Rothschild merely contemplates fixed imaging centers, as illustrated, for example, beginning at col. 8, line 12, where Rothschild discusses providing a medical image management system to address the needs of referring physicians and other healthcare providers located outside of an imaging center.

Thus, as discussed above, Rothschild does not teach or suggest a "mobile imaging unit" as recited in independent claims 1, 9, and 13, from which claims 6, 12, and 16 respectively depend. In addition, Evans does not overcome at least this shortcoming of Rothschild because, as discussed above and as acknowledged by the Examiner, Evans does not teach or suggest a "mobile imaging unit" as recited in independent claims 1, 9, and 13. Thus, neither Evans nor Rothschild, alone or in combination, teach or suggest elements of independent claims 1, 9, and 13, from which claims 6, 12, and 16 respectively depend. Therefore, the Applicant respectfully submits that the Examiner's rejection has been overcome and dependent claims 6, 12, and 16 are in condition for allowance.

The Applicant now turns to the rejection of claims 17-20 under 35 U.S.C. § 103(a) as being unpatentable over Applicant's Background and further in view of Rothschild. Claim 18

has been cancelled. With regard to claims 17 and 19-20, Applicant's Background identifies a problem that had yet to be solved and a combination that had yet to be realized in the art. The Applicant's Background addresses deficiencies which are remedied by the Applicant's novel solution and not by Rothschild. As discussed above, Rothschild does not teach or suggest a "mobile imaging unit" and thus, cannot provide any motivation two combine a mobile imaging unit with a medical application center, as recited in independent claim 17. Therefore, the Applicant respectfully submits that the Examiner's rejection has been overcome and independent claim 17, and corresponding dependent claims 19-20, are in condition for allowance.

The Applicant now turns to the rejection of claim 23 under 35 U.S.C. § 103(a) as being unpatentable over Wood '035 and further in view of Evans. As discussed above, Wood '035 does not teach or suggest a mobile imaging unit adapted to be used at a plurality of locations as recited in amended independent claim 21, from which claim 23 depends. In addition, Evans does not overcome at least this shortcoming of Wood '035 because, as discussed above and as acknowledged by the Examiner, Evans does not teach or suggest a "mobile imaging unit" as recited in independent claim 21. Thus, neither Wood '035 nor Evans, alone or in combination, teach or suggest elements of independent claim 21, from which claim 23 depends. Therefore, the Applicant respectfully submits that the Examiner's rejection has been overcome and dependent claim 23 is in condition for allowance.

The Applicant now turns to the rejection of claims 24-32 and 35-36 under 35 U.S.C. § 103(a) as being unpatentable over Evans and further in view of Rothschild. As discussed above and as acknowledged by the Examiner, Evans does not teach or suggest a "mobile imaging unit"

as recited in independent claims 24, 28, and 29. In addition, Rothschild does not overcome at least this shortcoming of Evans because, as discussed above, Rothschild does not teach or suggest a "mobile imaging unit" as recited in independent claims 24, 28, and 29. Thus, neither Evans nor Rothschild, alone, or in combination, teach or suggest elements of independent claims 24, 28, and 29. Therefore, the Applicant respectfully submits that the Examiner's rejection has been overcome and independent claims 24, 28, and 29, and corresponding dependent claims 25-27, 30-32, and 35-36 are in condition for allowance.

### CONCLUSION

It is submitted that the present application is in condition for allowance and a Notice of Allowability is respectfully solicited. If the Examiner has any questions or the Applicant can be of any assistance, the Examiner is invited and encouraged to contact the Applicant at the number below.

The Commissioner is authorized to charge any necessary fees or credit any overpayment to the Deposit Account of GEMS-IT, Account No. 50-2401.

Respectfully submitted,

Date:	February 8, 2006	

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**Attorney Docket No.:** 15-IS-5713 (13033US01)

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the Application of:

Thanos Karras

09/681,306

Filed:

Serial No.:

March 15, 2001

For:

INTEGRATION OF MOBILE

IMAGING UNITS INTO AN

APPLICATION SERVICE PROVIDER

FOR DATA STORAGE AND

INFORMATION SYSTEM SUPPORT

Examiner: Bleck, Carolyn M.

Group Art Unit: 3626

Conf. No.: 9546

## CERTIFICATION OF ELECTRONIC FILING

I hereby certify that this correspondence is being filed electronically with the Patent and Trademark Office on June 14, 2006.

Christopher N. George

Signature

## **AMENDMENT**

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Examiner Bleck:

This Amendment is being submitted in response to the Final Office Action mailed April 14, 2006. This Amendment is timely because it is being submitted within the shortened two-month period for response ending June 14, 2006. The Applicant requests that this Amendment be entered and considered.

# AMENDMENTS TO THE CLAIMS

1. (Previously Presented) A remotely accessible centralized medical information system, said system comprising:

a mobile imaging unit for generating medical data storable in a data center, wherein said mobile imaging unit is a mobile facility adapted to be used at a plurality of locations;

at least one data retriever for retrieving data from a data center; and

a data center for storing data, said data center accessible from said at least one data retriever, said at least one data retriever located at at least one distinct geographic retrieval point.

# 2. (Cancelled)

- 3. (Original) The system of claim 1, wherein said data retriever comprises a mobile imaging unit.
- 4. (Original) The system of claim 1, wherein said data retriever comprises a healthcare facility.
- 5. (Currently Amended) The system of claim 1, further including a healthcare facility, wherein said healthcare facility is adapted to generated generate medical data storable in said data center.
- 6. (Original) The system of claim 1, wherein said data center comprises an application service provider.
- 7. (Previously Presented) The system of claim 1, wherein said mobile imaging unit generates medical images.
- 8. (Previously Presented) The system of claim 1, wherein said mobile imaging unit generates medical reports.

- (Previously Presented) A centralized medical information system, said
   system comprising:
- a mobile imaging unit for generating data storable in a data center, wherein said mobile imaging unit is a mobile facility adapted to be used at a plurality of locations; and
- a data center for storing data, said data center geographically distinct from said mobile imaging unit.

# 10. (Cancelled)

- 11. (Previously Presented) The system of claim 9, wherein said data generator comprises further including a healthcare facility, wherein said healthcare facility is adapted to generate data storable in said data center.
- 12. (Original) The system of claim 9, wherein said data center comprises an application service provider.
- 13. (Previously Presented) A centrally accessible medical information system, said system comprising:
- a mobile imaging unit for retrieving data from a data center, wherein said mobile imaging unit is a mobile facility adapted to be used at a plurality of locations; and
- a data center for storing data, said data center geographically distinct from said mobile imaging unit.
- 14. (Previously Presented) The system of claim 13, wherein said data retriever comprises further including a healthcare facility, wherein said healthcare facility is adapted to retrieve data from a data center.

# 15. (Cancelled)

16. (Original) The system of claim 13, wherein said data center comprises an application service provider.

- 17. (Previously Presented) A remotely accessible centralized medical application service provider system, said system comprising:
- a medical application center including at least one medical application, said medical application center including processing power for accessing said medical application; and
- a mobile imaging unit, wherein said mobile imaging unit is a mobile facility adapted to be used at a plurality of locations, said mobile imaging unit accessing the output of said medical application.

# 18. (Cancelled)

- 19. (Previously Presented) The system of claim 17, further including a healthcare facility, wherein said healthcare facility is adapted to access the output of said medical application.
- 20. (Original) The system of claim 17, wherein said medical application center also stores administrative applications.
- 21. (Previously Presented) A remotely accessible centralized data storage system for mobile medical imaging, said system comprising:
- a mobile imaging unit including medical imaging equipment, wherein said mobile imaging unit is a mobile facility adapted to be used at a plurality of locations;
  - a data center storing medical information in electronic form; and
- a mobile imaging unit/data center communication interface allowing medical information to be transmitted between said mobile imaging unit and said data center.
- 22. (Original) The system of claim 21, further comprising a healthcare facility and a healthcare facility/data center communication interface allowing medical information transmission between said data center and said healthcare facility.

- 23. (Original) The system of claim 22, further comprising an authentication module for authorizing access to said data center from at least one of said healthcare facility and said mobile imaging unit.
- 24. (Previously Presented) A method for remotely storing medical information, said method comprising:

transmitting medical information collected from a patient at a mobile imaging unit to a data center, wherein said mobile imaging unit is a mobile facility adapted to be used at a plurality of locations; and

storing said medical information at said data center.

- 25. (Original) The method of claim 24, wherein said step of storing includes authenticating access to said data center.
- 26. (Previously Presented) The method of claim 24, further comprising the step of retrieving said medical information from said data center.
- 27. (Original) The method of claim 26, wherein the step of retrieving includes authenticating access to said data center.
- 28. (Previously Presented) A method of communicating between a mobile imaging unit and a healthcare facility, said method comprising:

transmitting information from said mobile imaging unit to a data center, wherein said mobile imaging unit is a mobile facility adapted to be used at a plurality of locations; and retrieving said information from said data center at said healthcare facility.

29. (Previously Presented) A system for communication between a mobile imaging unit and a healthcare facility, said system comprising:

a mobile imaging unit capable of transmitting medical diagnostic information, wherein said mobile imaging unit is a mobile facility adapted to be used at a plurality of locations;

- a data center capable of receiving said medical diagnostic information, storing said medical diagnostic information, and transmitting said medical diagnostic information; and a healthcare facility capable of accessing said medical diagnostic information from said data center.
- 30. (Original) The system of claim 29, wherein said data center is further capable of storing medical applications and executing medical applications.
- 31. (Original) The system of claim 30, wherein said mobile imaging unit is further capable of executing medical applications via said data center.
- 32. (Original) The system of claim 30, wherein said healthcare facility is further capable of executing medical applications via said data center.
- 33. (Previously Presented) A method for remotely accessing medical information, said method comprising:

accessing a data center from a mobile imaging unit at a remote location, wherein said mobile imaging unit is a mobile facility adapted to be used at a plurality of locations; and retrieving medical information from said data center.

- 34. (Original) The method of claim 33, wherein said step of accessing includes authenticating access to said data center.
- 35. (Previously Presented) The method of claim 28, further comprising remotely analyzing said information at said data center via at least one of said mobile imaging unit and said healthcare facility.
- 36. (Previously Presented) The method of claim 28, further comprising aggregating data from a plurality of geographic locations at said data center using at least one of said mobile imaging unit and said healthcare facility.

#### REMARKS

The present application includes claims 1, 3-9, 11-14, 16-17 and 19-36. Claims 1, 3-9, 11-14, 16-17 and 19-36 have been rejected by the Examiner. By this Amendment, claim 5 has been amended to correct a typographical error.

Claim 5 was objected to because of "generated" versus "generate." By this response, claim 5 has been amended accordingly to correct the typographical error.

Claims 21-22 were rejected under 35 U.S.C. § 102(b) as being anticipated by Wood et al., U.S. Pat. No. 5,891,035 ("Wood '035").

Claims 1, 4-5, 7-9, 11, 13-14, 33-34 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Evans, U.S. Pat. No. 5,924,074 ("Evans") in view of Wood et al., U.S. Pat. No. 5,851,186 ("Wood '186").

Claim 3 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Evans and Wood '186 and further in view of Wood '035.

Claims 6, 12, and 16 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Evans and Wood '186 and further in view of Rothschild et al., U.S. Pat. No. 6,678,703 ("Rothschild").

Claims 17 and 19-20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Applicant's Background and further in view of Rothschild.

Claim 23 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Wood '035 and further in view of Evans.

Claims 24-32 and 35-36 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Evans and further in view of Rothschild and Wood '035.

The Applicant first turns to the rejection of claims 21-22 under 35 U.S.C. § 102(b) as being anticipated by Wood '035. Wood '035 generally relates to an ultrasonic diagnostic imaging system with data access and communications capability. Wood '035 discusses, beginning at col. 3, line 27 and as illustrated in Fig. 1, an ultrasound system including an HTTP server. The HTTP server is connected to access ultrasonic images and reports from a storage medium and make the system's images and reports accessible to a computer, terminal, or workstation at a remote location.

As shown in Fig. 2, the ultrasound system of Wood '035 is illustrated on a mobile cart. The ultrasound system of Wood '035 is not a *mobile facility* adapted to be used at a plurality of locations, as recited in claim 21, as amended in the Office Action Response of Feb. 8, 2006. Wood '035 does not teach or fairly suggest at least "a mobile imaging unit including medical imaging equipment, wherein said mobile imaging unit is a mobile facility adapted to be used at a plurality of locations." Rather, Wood '035 simply discloses the medical imaging equipment. Even though the ultrasound system may have wheels, it is still medical imaging equipment and not a mobile facility including medical imaging equipment. Additionally, Wood '035 does not disclose "a mobile imaging unit/data center communication interface allowing medical information to be transmitted between said mobile imaging unit and said data center" for at least the reason that Wood '035 simply does not disclose a mobile imaging unit as recited in claim 21.

Therefore, the Applicant respectfully submits that the Examiner's rejection has been overcome and that independent claim 21, and corresponding dependent claim 22, are in condition for allowance.

The Applicant now turns to the rejection of claims 1, 4-5, 7-9, 11, 13-14, 33-34 under 35 U.S.C. § 103(a) as being unpatentable over Evans in view of Wood '186. Evans generally relates to an electronic medical records system. As discussed beginning at col. 2, line 22, Evans discusses an electronic medical record system that automates and simplifies patient chart creation, maintenance, and retrieval. Evans creates and maintains all patient data electronically. As mentioned at col. 2, lines 45-47, Evans provides instant access to a patient's electronic medical record from any geographical location. That is, as clarified at col. 15, lines 18-20, Evans supports a large healthcare enterprise distributed across a large geography as well as a single physician office. Thus, Evans addresses geographically distributed, but fixed, facilities.

Evans does not teach mobile facilities, such as, mobile imaging units. The Examiner stated in the Office Action mailed January 25, 2006, at page 8, and in the Office Action mailed April 14, 2006, at page 5, that Evans fails to expressly disclose that a data generator is a mobile imaging unit. Similarly, at page 10 of the January Office Action and at page 6 of the April Office Action, the Examiner also states that Evans fails to expressly disclose the data retriever comprising a mobile imaging unit. And again, at pages 15 and 8, respectively, the Examiner states that Evans fails to expressly disclose "a mobile imaging unit" transmitting information to a data center.

Wood '186 relates to an ultrasonic diagnostic imaging system with universal access to diagnostic information and images. As discussed at col. 1, lines 43-48, Wood '186 discloses a medial diagnostic ultrasonic imaging system that can be remotely accessed, interrogated, or controlled from a remote location to provide information about the system's operating characteristics, patient images, and reports.

As in Wood '035, Wood '186 does not teach or suggest a mobile imaging unit, wherein the mobile imaging unit is a mobile facility adapted to be used at a plurality of locations. Although Figs. 15-17, similar to Fig. 2 in Wood '035, described above, illustrate an ultrasound system on a wheeled cart, the ultrasound system of Wood '186 (and of Wood '035) is a medical imaging system and not a mobile imaging unit (i.e., a mobile imaging facility), as recited in independent claims 1, 9, 13 and 33, as well as their dependent claims.

Thus, as discussed above, neither Evans nor Wood '186 teaches or suggests a "mobile imaging unit" as recited in independent claims 1, 9, 13, and 33. Taking the references separately or putting them together in any real or hypothetic situation does not teach or fairly suggest such a mobile imaging unit as recited in the pending claims of the present application. To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). MPEP 706.02(j).

Therefore, the Applicant respectfully submits that the Examiner's rejection has been overcome and that independent claims 1, 9, 13, and 33, and corresponding dependent claims 4-5, 7-8, 11, 14, and 34 are in condition for allowance.

The Applicant now turns to the rejection of claim 3 under 35 U.S.C. § 103(a) as being unpatentable over Evans and Wood '186 and further in view of Wood '035. With respect to claim 3, as discussed above and as acknowledged by the Examiner, Evans does not teach or suggest a "mobile imaging unit" as recited in independent claim 1, from which claim 3 depends. In addition, neither Wood '035 nor Wood '186 overcome at least this shortcoming of Evans because, as discussed above, neither Wood '035 nor Wood '186 teach or suggest a mobile imaging unit, wherein the mobile imaging unit is a mobile facility adapted to be used at a plurality of locations, as recited in amended independent claim 1. Thus, none of Evans, Wood '035 or Wood '186, alone or in any combination, teach or suggest elements of independent claim 1, from which claim 3 depends. Therefore, the Applicant respectfully submits that the Examiner's rejection has been overcome and dependent claim 3 is in condition for allowance.

The Applicant now turns to the rejection of claims 6, 12, and 16 under 35 U.S.C. § 103(a) as being unpatentable over Evans and Wood '186 and further in view of Rothschild. Rothschild generally relates to medical image management. Rothschild discusses, beginning at col. 17, line 66, storing images at three separate locations including locally at an imagining center and at two central data centers. In addition, images may be stored at a fourth remote viewing location. As illustrated in Fig. 1 and described beginning at col. 18, line 29, Rothschild discloses a medical image management system including a medical imaging system, a local image workstation, a central data management system, and a remote image viewing system.

Rothschild does not teach or suggest mobile facilities, such as, mobile imaging units.

Rather, Rothschild merely contemplates fixed imaging centers, as illustrated, for example, beginning at col. 8, line 12, where Rothschild discusses providing a medical image management

system to address the needs of referring physicians and other healthcare providers located outside of an imaging center.

Thus, as discussed above, Rothschild does not teach or suggest a "mobile imaging unit" as recited in independent claims 1, 9, and 13, from which claims 6, 12, and 16 respectively depend. In addition, Evans and Wood '186 do not overcome at least this shortcoming of Rothschild because, as discussed above, Evans and Wood '186 do not teach or suggest a "mobile imaging unit" as recited in independent claims 1, 9, and 13. Thus, none of Evans, Wood '186 or Rothschild, alone or in combination, teach or suggest elements of independent claims 1, 9, and 13, from which claims 6, 12, and 16 respectively depend. Therefore, the Applicant respectfully submits that the Examiner's rejection has been overcome and dependent claims 6, 12, and 16 are in condition for allowance.

The Applicant now turns to the rejection of claims 17 and 19-20 under 35 U.S.C. § 103(a) as being unpatentable over Applicant's Background and further in view of Rothschild. With regard to claims 17 and 19-20, Applicant's Background identifies a problem that had yet to be solved and a combination that had yet to be realized in the art. The Applicant's Background addresses deficiencies which are remedied by the Applicant's novel solution and not by Rothschild. For example, the Applicant notes that "[t]here is a need for centralized data storage to enable the patient's choice of hospital or clinical location." This is a need that the Applicant is attempting to satisfy with his invention. Furthermore, "[t]here is a need for a method of aggregating patient imaging results from mobile imaging units to eliminate manual transfer of files and to facilitate interaction among mobile units and between mobile units and healthcare facilities." This was a need the Applicant saw and was trying to meet. Centralized scheduling

and reporting was another need that was unmet with mobile imaging units that the Applicant identified. "Thus, a need exists for a method and apparatus for integration of mobile imaging units into an Application Service Provider for data storage and information system support." Clearly these statements were not admissions of prior art but, conversely, were highlighting problems and/or deficiencies which existed and for which remedies have been found in various embodiments of the invention described in the remainder of the patent application.

As discussed above, Rothschild does not teach or suggest a "mobile imaging unit" and thus, cannot provide any motivation to combine a mobile imaging unit with a medical application center, as recited in independent claim 17. Therefore, the Applicant respectfully submits that the Examiner's rejection has been overcome and independent claim 17, and corresponding dependent claims 19-20, are in condition for allowance.

The Applicant now turns to the rejection of claim 23 under 35 U.S.C. § 103(a) as being unpatentable over Wood '035 and further in view of Evans. As discussed above, Wood '035 does not teach or suggest a mobile imaging unit, wherein the mobile imaging unit is a mobile facility adapted to be used at a plurality of locations as recited in amended independent claim 21, from which claim 23 depends. In addition, Evans does not overcome at least this shortcoming of Wood '035 because, as discussed above and as acknowledged by the Examiner, Evans does not teach or suggest a "mobile imaging unit" as recited in independent claim 21. Thus, neither Wood '035 nor Evans, alone or in combination, teach or suggest elements of independent claim 21, from which claim 23 depends. Therefore, the Applicant respectfully submits that the Examiner's rejection has been overcome and dependent claim 23 is in condition for allowance.

The Applicant now turns to the rejection of claims 24-32 and 35-36 under 35 U.S.C. § 103(a) as being unpatentable over Evans in view of Rothschild and further in view of Wood '035. As discussed above and as acknowledged by the Examiner, Evans does not teach or suggest a "mobile imaging unit" as recited in independent claims 24, 28, and 29. In addition, Rothschild does not overcome at least this shortcoming of Evans because, as discussed above, Rothschild does not teach or suggest a "mobile imaging unit" as recited in independent claims 24, 28, and 29. Furthermore, as discussed above, Wood '035 does not teach or suggest a "mobile imaging unit" as recited in independent claims 24, 28 and 29. Thus, none of Evans, Rothschild or Wood '035, alone, or in combination, teach or suggest all of the elements of independent claims 24, 28, and 29. Therefore, the Applicant respectfully submits that the Examiner's rejection has been overcome and independent claims 24, 28, and 29, and corresponding dependent claims 25-27, 30-32, and 35-36 are in condition for allowance.

Thus, none of the cited art teaches or fairly suggests at least the claimed limitation of a mobile imaging unit, wherein the mobile imaging unit is a mobile facility adapted to be used at a plurality of locations. This limitation is found in all of the pending claims and need not be implicitly read from the specification into the claims. The Applicant does define a "mobile imaging unit" in the claims and provides some exemplary embodiments in the specification (e.g., a truck or van), which may *include* equipment for magnetic resonance, computerized tomography, ultrasound, and/or other imaging or monitoring equipment (e.g., ECG) to facilitate medical examination of patients). (See, e.g., page 1, paragraph 2, page 2, paragraph 1 and page 8, paragraphs 2-3).

Therefore, the Applicant respectfully submits that the Examiner's concerns have been addressed and the cited art does not teach or suggest the limitations of the presently claimed invention. The Applicant submits that the pending claims are in condition for allowance.

# CONCLUSION

It is submitted that the present application is in condition for allowance and a Notice of Allowability is respectfully solicited. If the Examiner has any questions or the Applicant can be of any assistance, the Examiner is invited and encouraged to contact the Applicant at the number below.

The Commissioner is authorized to charge any necessary fees or credit any overpayment to the Deposit Account of GEMS-IT, Account No. 50-2401.

Respectfully submitted,

Date:	Tune	14	2006_
Daw.	June	17,	<del>2000</del> _

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# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspio.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/681,306	03/15/2001	Thanos Karras	13033US01	9546
23446 75	590 07/05/2006		EXAMINER	
MCANDREWS HELD & MALLOY, LTD			BLECK, CAROLYN M	
500 WEST MA SUITE 3400	DISON STREET		ART UNIT	PAPER NUMBER
CHICAGO, IL	60661		3626	
			D. TT	,

DATE MAILED: 07/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

### Applicant(s) Application No. Advisory Action KARRAS ET AL. 09/681,306 Before the Filing of an Appeal Brief Examiner **Art Unit** 3626 Carolyn M. Bleck --The MAILING DATE of this communication appears on the cover sheet with the correspondence address --THE REPLY FILED 14 June 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. 1. X The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods: \_\_months from the mailing date of the final rejection. The period for reply expires \_\_\_\_ b) 🛮 The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. Examiner Note: If box 1 is checked, check either box (a) or (b), ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f). Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). **NOTICE OF APPEAL** 2. The Notice of Appeal was filed on . A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a). 3. The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because (a) They raise new issues that would require further consideration and/or search (see NOTE below);

(c) They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for

4. The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).

6. Newly proposed or amended claim(s) would be allowable if submitted in a separate, timely filed amendment canceling the

7. X For purposes of appeal, the proposed amendment(s): a) will not be entered, or b) X will be entered and an explanation of

8. The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will <u>not</u> be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and

9. The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be

showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).

10. The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

11. The request for reconsideration has been considered but does NOT place the application in condition for allowance because:

entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a

(d) They present additional claims without canceling a corresponding number of finally rejected claims.

(b) They raise the issue of new matter (see NOTE below);

5. Applicant's reply has overcome the following rejection(s):

The status of the claim(s) is (or will be) as follows:

Claim(s) rejected: 1, 3-9, 11-14, 16-17, 19-36. Claim(s) withdrawn from consideration: none.

was not earlier presented. See 37 CFR 1.116(e).

REQUEST FOR RECONSIDERATION/OTHER

See Continuation Sheet.

\_. (See 37 CFR 1.116 and 41.33(a)).

how the new or amended claims would be rejected is provided below or appended.

12. Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s).

appeal; and/or

non-allowable claim(s).

Claim(s) allowed: <u>none</u>. Claim(s) objected to: <u>none</u>.

AFFIDAVIT OR OTHER EVIDENCE

U.S. Patent and Trademark Office

PTOL-303 (Rev. 7-05)

13. Other: .

SUPERVISORY PATENT EXAMINER

#### Continuation of 7:

Claim 5 has been amended to correct a typographical error, and is rejected for the same reasons given in the prior Office Action.

Continuation of 11: The request for reconsideration has been considered but does NOT place the application in condition for allowance because:

Applicant's arguments have been fully considered but they are not persuasive. Applicant appears to rehash the arguments that were presented in the response to the Non-Final Office Action mailed on 1/25/06. In particular, Applicant repeats the arguments with regards to the differences between Applicant's claimed "mobile imaging unit" and the applied prior art. The Examiner has responded to these arguments in the Final Rejection mailed on 4/14/2006 and has clearly pointed out why the applied prior art teaches Applicant's claimed "mobile imaging unit."

Applicant has failed to provide nor was the Examiner able to find a strict definition of the term "mobile imaging unit" either in the claims or within the specification as originally filed. Therefore, the Examiner has given the claims their broadest reasonable interpretation (see MPEP 2111). In addition, although it is proper to use the specification to interpret what the Applicant meant by a word or phrase recited in the claim, it is not proper to read limitations appearing in the specification into the claim when these limitations are not recited in the claim. In re Paulsen, 30 F.3d 1475, 1480, 31 USPQ2d 1671, 1674 (Fed. Cir. 1994); Intervet America Inc. v. Kee-Vet Lab. Inc., 887 F.2d 1050, 1053, 12 USPQ2d 1474, 1476 (Fed. Cir. 1989). If Applicant requires a strict definition of the term, it is suggested that the Applicant amend the claims to better reflect what Applicant intends to claim as the invention.

In addition, it is respectfully submitted that the specification citations relied upon by the Applicant do not provide a positive definition of the claimed mobile imaging unit. Instead, the cited passages use non-commital language that only describes the features which "may be" included in the claimed mobile imaging unit in various embodiments. Such descriptions fail to define the required features of the mobile imaging unit. As such, the Examiner has given the claim language the broadest interpretation and has applied art accordingly. Further, if Applicant intends that a mobile imaging unit be a truck or a van, then Examiner suggests amending the claims to include this feature. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See In re Van Geuns, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).